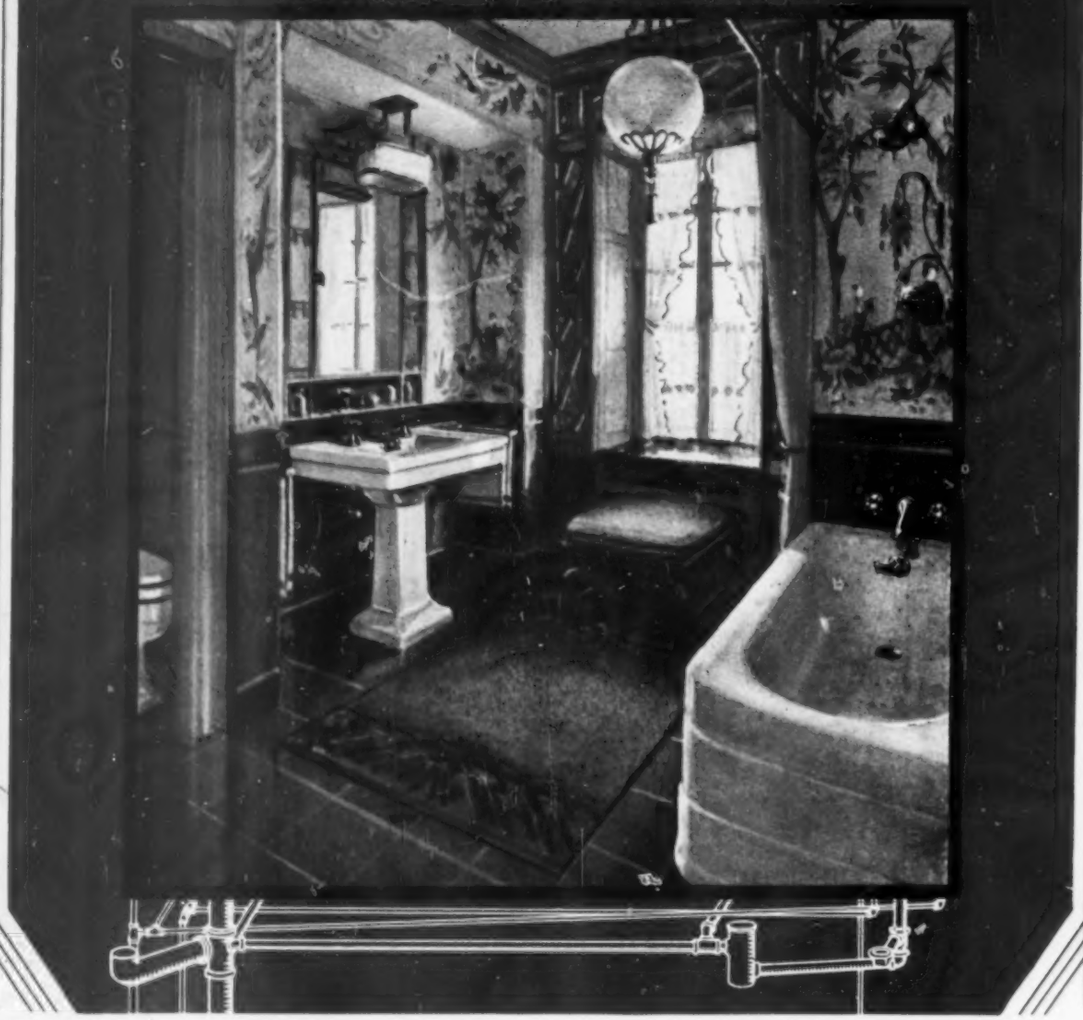
Fortune

One Dollar a Copy FEBRUARY 1930 Ten Dollars a Year

1855 · SEVENTY-FIFTH ANNIVERSARY · 1930



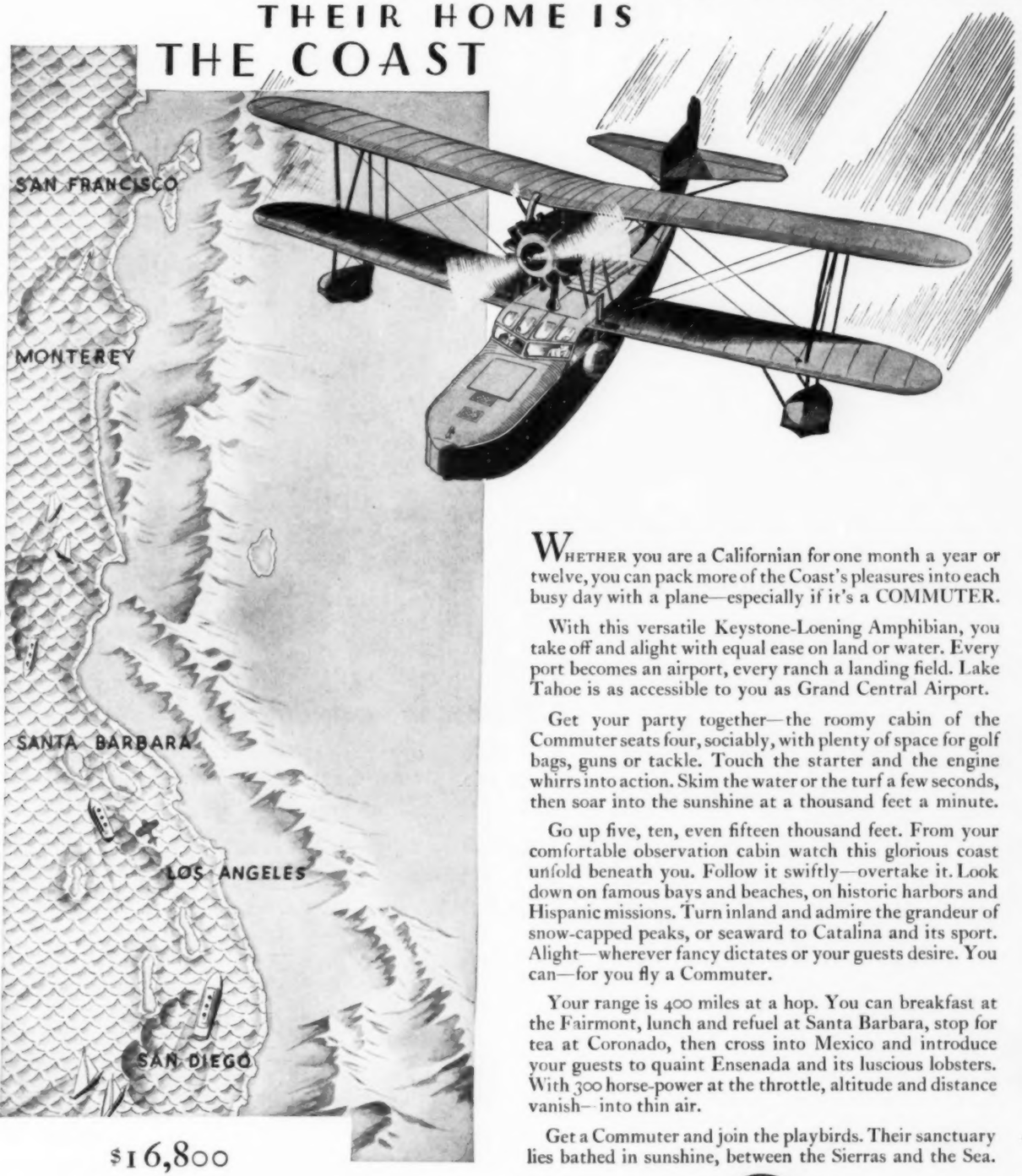
EVEN Sarah Bernhardt, who threatened to sue a hotel because an uninviting bathroom spoiled her day and her evening performance, would have been charmed by the beauty of this typical Crane room. Even the most frugal will be delighted by the economy with which this beauty is here offered to American home builders. The *Corwith* bath with overhead shower, the *Norwich* lavatory, the *Santon* closet, all new fixtures full of character, cost no more than old-fashioned clumsy ones. The delicate India ivory hue in the fixtures adds only a fraction to the complete cost of a bathroom. The decorations . . . linoleum for the floor, canvased wainscot, papered walls . . . actually can be had for less than a stereotyped room. For a book of twelve such beautiful rooms, one of which may exactly fit your taste, purse, and house, write for the book, *Bathrooms for Out-of-the-Ordinary Homes.* Your architect and plumbing contractor will help you plan and make the installation.

Valves **CRANE** *Fittings*

FIXTURES, VALVES, FITTINGS, AND PIPING, FOR DOMESTIC AND INDUSTRIAL USE

Crane Co., General Offices: 836 S. Michigan Ave., Chicago • 23 W. 44th St., New York • Branches and sales offices in one hundred and ninety cities

PLAYBIRDS OF PARADISE
THEIR HOME IS
THE COAST



$16,800

KEYSTONE-LOENING AMPHIBIAN COMMUTER

U. S. DEPARTMENT OF COMMERCE APPROVED TYPE CERTIFICATE NO. 819

WHETHER you are a Californian for one month a year or twelve, you can pack more of the Coast's pleasures into each busy day with a plane—especially if it's a COMMUTER.

With this versatile Keystone-Loening Amphibian, you take off and alight with equal ease on land or water. Every port becomes an airport, every ranch a landing field. Lake Tahoe is as accessible to you as Grand Central Airport.

Get your party together—the roomy cabin of the Commuter seats four, sociably, with plenty of space for golf bags, guns or tackle. Touch the starter and the engine whirrs into action. Skim the water or the turf a few seconds, then soar into the sunshine at a thousand feet a minute.

Go up five, ten, even fifteen thousand feet. From your comfortable observation cabin watch this glorious coast unfold beneath you. Follow it swiftly—overtake it. Look down on famous bays and beaches, on historic harbors and Hispanic missions. Turn inland and admire the grandeur of snow-capped peaks, or seaward to Catalina and its sport. Alight—wherever fancy dictates or your guests desire. You can—for you fly a Commuter.

Your range is 400 miles at a hop. You can breakfast at the Fairmont, lunch and refuel at Santa Barbara, stop for tea at Coronado, then cross into Mexico and introduce your guests to quaint Ensenada and its luscious lobsters. With 300 horse-power at the throttle, altitude and distance vanish—into thin air.

Get a Commuter and join the playbirds. Their sanctuary lies bathed in sunshine, between the Sierras and the Sea.

KEYSTONE AIRCRAFT CORPORATION
Division of CURTISS-WRIGHT CORPORATION
Sales Offices: 27 West 57th Street, New York

A little stream in mid-Canada—a stream of quiet beginning—divides and finds its way to both the Atlantic and the Pacific. Another stream, this time of creative thought in the brain of man, flowed forth to end in that colossus of commerce—the automobile industry. So with the airplane. So with radio. And so will it be with the next miracle of modern civilization

. . the world's ship comes in on a constant stream of ideas . .

Ideas rule. Ideas are wealth—power—progress. Ideas are all we are, and all we hope to be. Men who head great business institutions . . . men who toil in experimental laboratories . . . men who direct far-flung sales organizations . . . all recognize and respect this truth. These men, who give such intensive thought to their own projects, have a right to demand comparable creative power when they call upon the aid of advertising. Here, too, ideas rule. Without them advertising has little value. With them, it exerts almost limitless influence. Advertising, well conceived and well directed, is a stream which carries the fame of a product and its maker from the Atlantic to the Pacific . . . and thence across the world.

CAMPBELL-EWALD COMPANY

advertising well directed H. T. Ewald, President . . Offices in Detroit, New York, Chicago, Seattle, Los Angeles, Portland, San Francisco, Paris, France; Sydney, Australia; In Canada — Campbell-Ewald Limited, Toronto, Montreal.

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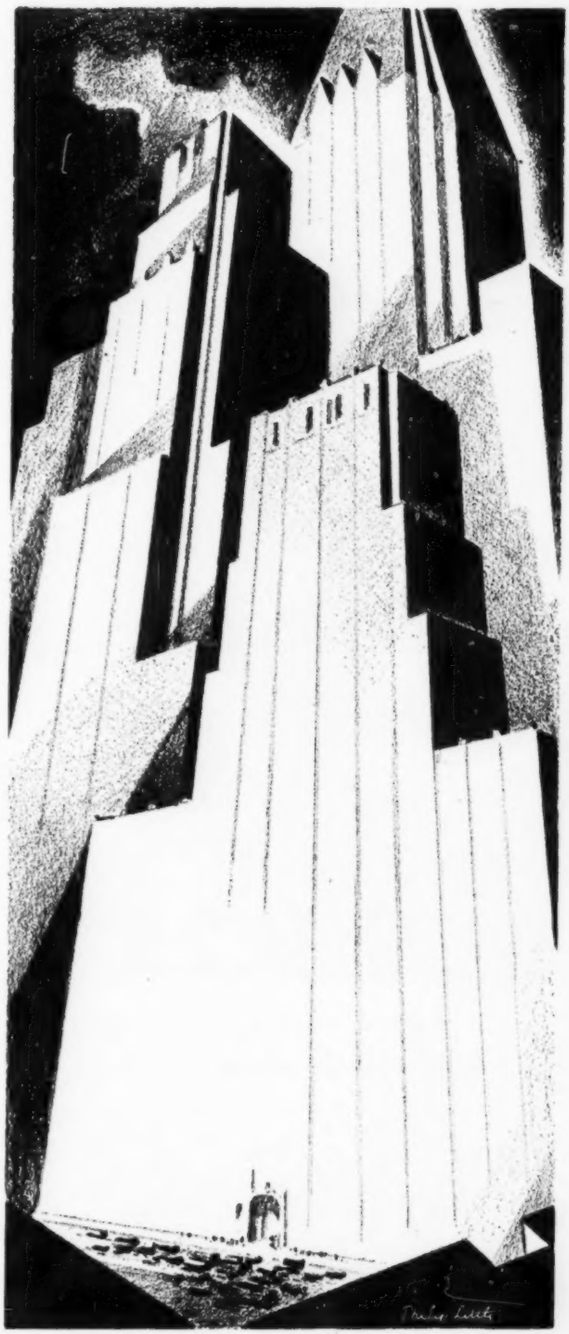
WESTWARD

AGAINST THE PROPHETIC SKY



SAN FRANCISCO IS RISING TO A NEW, HIGH PLACE IN THE SUN...

Today more than ever San Francisco is a name that is fraught with promise. Out of a spirited, pioneer past there has come a present whose force is dynamic.

First city when the West was a fledgling, San Francisco has come to be headquarters for one of America's strongest sectors... but even tonight, today will join the past... and the city is thinking of what is to be.

From this city's seven hills, California stretches north and south and east to embrace the most concentrated population in the West. Within a radius of one hundred and fifty miles live half the people of California, while 1,600,000 people of more than average per capita wealth live within a radius of an hour's ride. And 11,000,000 people who live west of the Rocky Mountains can be served more quickly and cheaply from San Francisco than from any other city.

But there is another, greater market that fascinates these modern minds! 900,000,000 people in the lands bordering the Pacific are awakening to the wonder of the world's progression... demanding more and more of the things it has to give. And San Francisco is the natural gateway for the commerce that is going to modernize these millions.

The great deep-water bay, already second in the United States in the value of water-borne tonnage, is but one of the natural advantages San Francisco is counting on. An even, workable climate that speeds production throughout the year, is another. Center of a region rich in natural resources (one of which is economical *natural gas*) and served by three great transcontinental railroads, the city and the area about the Bay need never know a western manufacturing equal. Finally, this far-seeing city is headquarters for the leading financial, railroad, lumber, hydro-electric and distributing as well as manufacturing and shipping interests of the Pacific Coast... right now...

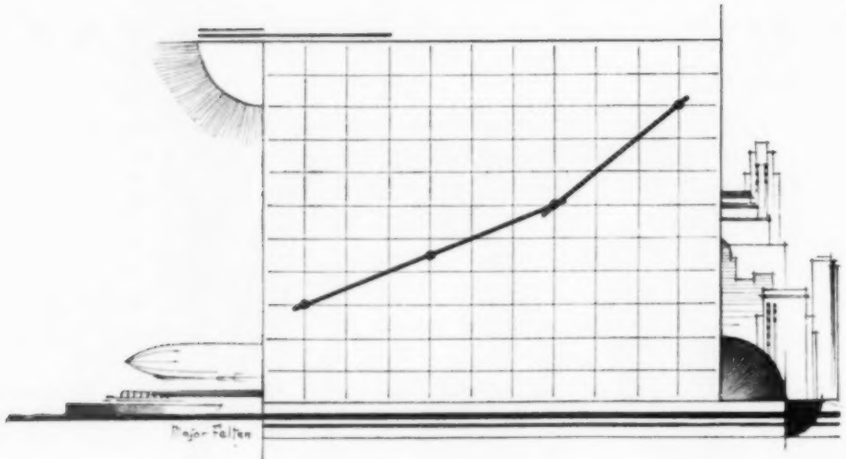
To the world-sung natural advantages this city owns—to these things that opportunity is built upon—San Francisco adds the splendid life that has made thousands who came first to visit return again to live.

Men of destiny are marking San Francisco's future *undeniable*... seeking ways and means to link it with their own.

Californians Inc., Dept. 2202, 703 Market Street, San Francisco, are anxious to tell you more about this city. Write today. You will receive a prompt, worth-while reply.

SAN FRANCISCO

IN CALIFORNIA—"WHERE LIFE IS BETTER"



Over the past ten years our growth in advertising volume has been like that...tripling in the period...We think this means...

the application of sound principles to advertising, a personnel that knows how to apply these principles, a form of organization that is basically sound, and client satisfaction with the results. Over a long period, agency growth is a pretty good indication of dependability and service.

THE H. K. McCann COMPANY
ADVERTISING

NEW YORK • CHICAGO • CLEVELAND • SAN FRANCISCO • LOS ANGELES • SEATTLE • DENVER
MONTREAL • TORONTO • LONDON • PARIS • FRANKFORT, o. M.

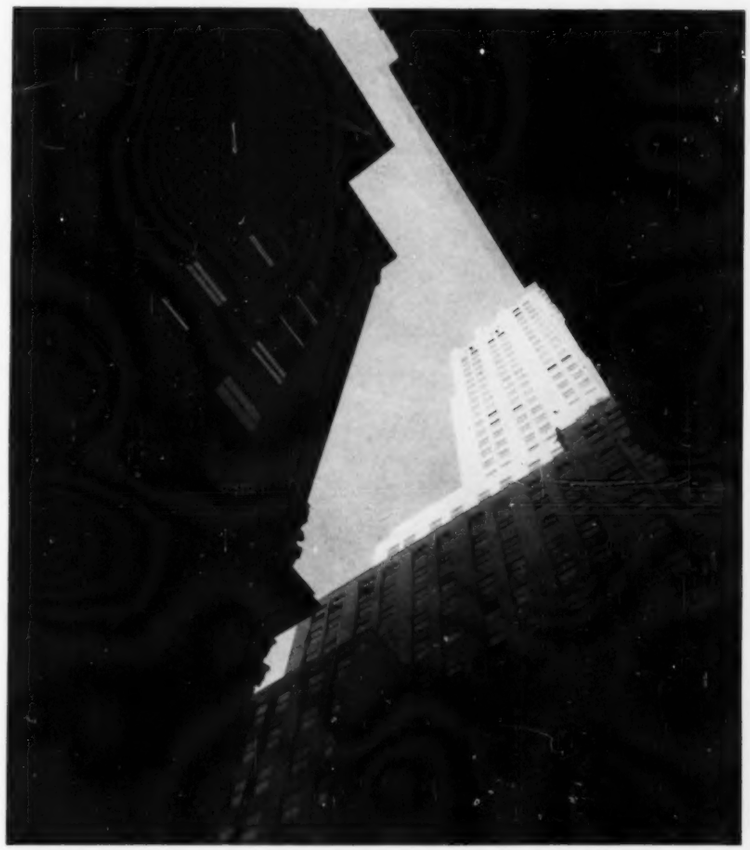
Are these TALLEST OFFICE BUILDINGS *already obsolete?*

They are—unless they have Manufactured Weather

Theatres have proved beyond question that people choose to go where air is conditioned for maximum comfort and health the year round.

Great department stores have found that people neglect other shops for those where their comfort is assured by Manufactured Weather.

Today tenants are enjoying this modern comfort in numerous offices.



THE newest great office building faces almost immediate obsolescence unless it has Manufactured Weather—just as the old building which was torn down to make way for it became obsolete the moment it lacked something that the tenants demanded. The office building which makes its own weather—which is cooled in summer and heated in winter with properly conditioned air—makes every other building not so modernized a thing of the past . . . a cheaper choice . . . a home for second-class business.

Manufactured Weather has proved its worth. It is not a luxury; it is a necessity—as fundamental a necessity as proper lighting, adequate elevator service.

Congress has it—the Nation's Representatives meet in the Capitol Halls, where, winter and summer, the air is warmed or cooled, humidified or de-humidified as the season demands, and it is always fresh, and literally washed clean.

Macy's has it, a dozen other famous department stores have it—they attract and hold shoppers by the thousands because of their relief and contentment in the fresh, pleasant Manufactured Weather of the store—independent of outdoor heat or cold or noise or dust.

Hundreds of factories have it—they use windows only for light. Sheer manufacturing economy has dictated that indoor air conditions must be constant and controllable.

Can we call that office building "modern" which has window poles in the corners, dust cloths in desk drawers, nerve-racking street noises in the ears of the workers—drafty spots near windows for executives and stuffy inner spaces for clerks?

Certainly not—for Manufactured Weather has banished these antiquated devices and conditions. The modern 1930 hotel or office building can no more countenance old-fashioned windows or fan ventilators than it could do without elevators.

Prove to yourself that this is true. Visit a theatre, a store, a factory or a building where it is already in operation—and answer for yourself.

Until you have done this, any estimate—any conception—you may have will fall short of the healthful comfort, the serenity, and the cleanliness that Manufactured Weather has to offer.

There is only one Manufactured Weather. It is the product of Willis H. Carrier and his associates.

Carrier Engineering Corporation

NEWARK, NEW JERSEY

OFFICES: NEW YORK . PHILADELPHIA . BOSTON . CHICAGO . CLEVELAND . WASHINGTON . DETROIT
KANSAS CITY . DALLAS . LOS ANGELES

CARRIER ENGINEERING COMPANY, LTD.
LONDON, PARIS, BOMBAY, CALCUTTA
JOHANNESBURG

CARRIER LUFTTECHNISCHE GESELLSCHAFT
STUTTGART, BERLIN

Manufactured Weather *makes* "Every day a *good* day"

The Alexander Hamilton Institute

ANNOUNCES

A New Course and Service for men who want to be independent in the next five years

THE next five years in American business will offer more opportunity *and more danger* than any similar period for a long time.

More men will achieve independence. More men who might achieve it will fail because of a failure to properly analyze the facts.

A right program will be more profitable than it has ever been. A wrong decision will be far more costly.

To put it in other words, the organization of business, the tempo of business, the speed of business are all in process of rapid change. The evidence is everywhere. In a brief period of thirty days between October 15th and November 15th, 1929, thousands of men who supposed that they were secure for life found themselves suddenly ruined. Thousands had their confidence so shaken that they are dazed and wondering. They have no plan. "What will happen to business in the next few years?" they are asking. "What program should we lay out for ourselves?"

The Institute foresaw the trend

Two years ago the Alexander Hamilton Institute, from its nation-wide contact with business leaders, sensed the tremendous changes which were about to come, and began to make preparations to meet them.

The Institute's original Course and Service in business was a great Course and did a great work. More than 398,000 men made it a part of their business equipment, and are far ahead because they did.

But the Institute saw that revolutionary changes were in prospect. Little business units were being merged into big units. Industries were reaching out into foreign markets. *Security prices were about to become subject to a whole new set of conditions.* Production methods were being revolutionized. The sales organization and strategy of the past were entirely unfitted for the new competition. The responsibilities of guiding the new business could not be discharged by men whose training had been in the old.

The Institute said: "We must prepare a wholly new Course to meet the new conditions. We must add authorities whose business success belongs to the present, and not to the past. They must be the biggest and most successful men of the present—the men who will be the leaders during the coming five years.

Without regard to cost, the Institute went out to enlist the co-operation of the nation's business leaders. The response was even beyond its most sanguine expectations. In effect, one and all these men said:

"The greatest need of all is for trained leadership. Count on us. Any contribution we can make to this New Executive Training will be a contribution to our own best interests, because it will furnish us with more of the sort of executives we need."

It is impossible in this page to give detailed facts about the New Course and Service. It is new from start to finish—so new that the latter part will not be entirely off the presses for some months. Every unit will come to you fresh and live and breathing—straight from the very inner sanctums of this new business world.

We invite you to send for the full facts in a new book entitled: "What an Executive Should Know." It is a volume that should be read by every man who expects to win a secure place for himself in the next five years. It is well worth an hour of your time. And it is free.

Send for your copy today. You cannot gain a proper perspective on what lies ahead unless you look at the picture through the eyes of the country's biggest men.

Alexander Hamilton Institute, 992 Astor Place, New York City. (In Canada address Alexander Hamilton Institute, Ltd., C. P. R. Building, Toronto)

Please send me "What an Executive Should Know," which describes the new Modern Business Course and Service.

Name_____

Business Address_____ Business Position_____

1880 GOLDEN ANNIVERSARY YEAR 1930

DAVEY TREE SURGERY

Reproduction from a painting made on the estate of Adolph S. Ochs, Lake George, New York, by Frank Swift Chase

© The D. T. E. Co., Inc., 1930

3¼ million dollar Davey tree-saving business in 1929

NOTWITHSTANDING this large volume of business, 75.5% of clients pay less than $100.00 each for the service of internationally famous Davey Tree Surgeons. You might wonder why it is possible to secure this reliable, expert service at so low an average cost.

In the first place, Davey men are really local to you. They are thoroughly trained in Ohio and are then sent out to live in the many localities where Davey clients are served. They are easily available for large or small operations.

JOHN DAVEY
1846-1923
Father of Tree Surgery
Reg. U. S. Pat. Office

In the second place, nearly all Davey men are motor equipped and can go quickly from one operation to another in the sections where they live. The element of lost time is negligible.

In the next place, Davey Tree Surgeons know what to do. They do not waste any time in guessing or in experimenting. Not only are they real experts in actual performance, but they are specially trained in the all-important matter of diagnosis.

And last, but by no means least, Davey men are workers. No one is permitted to remain in the Davey organization unless he works diligently and honestly. You can trust Davey Tree Surgeons.

Send for nearest Davey representative to make a careful examination of your priceless trees without obligation. Write or wire Kent, Ohio, or telephone nearest branch office.

Tune In Davey Tree Golden Anniversary Radio Hour

Every Sunday afternoon, 5 to 6 Eastern time; 4 to 5 Central time; over the Red Network National Broadcasting Company. Featuring the old-time songs that everyone knows and loves. Listen to Chandler Goldthwaite on the Skinner Organ.

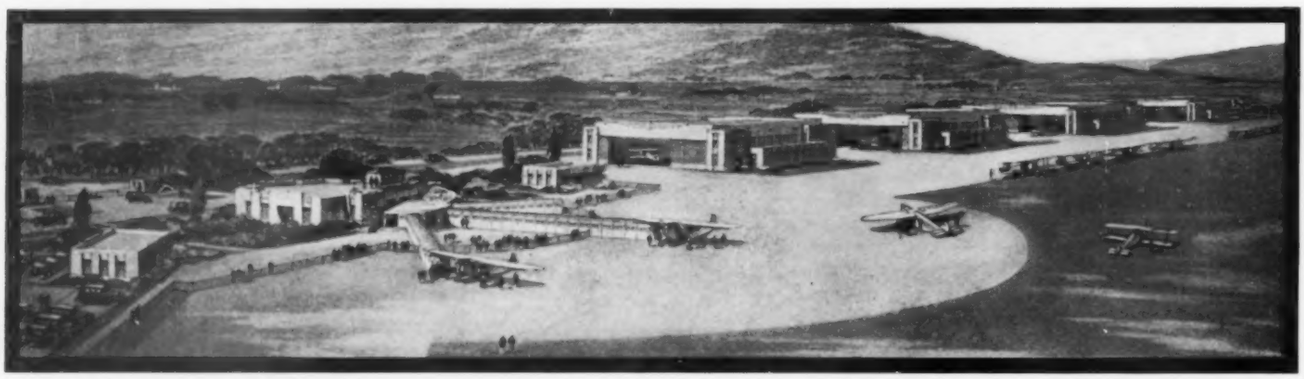
THE DAVEY TREE EXPERT CO., Inc., 400 City Bank Bldg., Kent, Ohio

MARTIN L. DAVEY, *President and General Manager*

Branch offices with telephone connections: Boston, Springfield, Pittsfield, Providence, Hartford, Stamford, New York City, White Plains, Patchogue, L. I., Hempstead, L. I., Albany, Syracuse, Rochester, Buffalo, Toronto, Montreal, Orange, N. J., Ridgewood, N. J., Philadelphia, Addingham, Pa., Germantown, Pa., Baltimore, Washington, Pittsburgh, Cleveland, Toledo, Columbus, Dayton, Cincinnati, Indianapolis, Louisville, Detroit, Grand Rapids, Chicago, Oconomowoc, Wis., Minneapolis, Des Moines, St. Louis, Kansas City, Mo., Tulsa, Okla., New Orleans, Memphis, Nashville, Atlanta, Charlotte, N. C.

All Aviation is invited to use the Curtiss-Wright Airports

A nation-wide chain to provide facilities for the entire industry



Pittsburgh is the gateway between East and West air traffic. Bettis Airport is strategically located 20 minutes from the post office on the Pittsburgh-McKeesport highway.

THIS first nation-wide system of major airports in the United States is unified under Curtiss-Wright Airports Corporation ownership and management.

Each port is strategically located to business centers—and on the main highways of both present and future air travel.

Preferred space is for lease today on exceptional terms to transport companies, aerial photographers, railroads who will engage in air transportation, manufacturers of planes, of engines, supplies, accessories, fuel companies, and to all commercial operators and private plane owners. Only student instruction and local passenger carrying are reserved exclusively for the Curtiss-Wright Flying Service on these ports.

Among the leading aviation interests who have *already* leased space on Curtiss-Wright ports are: American Eagle Co., American Moth Distributors, Clifford Ball Airlines, Continental Air Express, Hodgkinson Aircraft Co., Irving Air Chute Co., Inc., Kinner Airplane Motor Co., Maddux Air Lines, Nevada Air Lines, Pennsylvania Air Lines, Pickwick Airways, Inc., Rio Grande Oil Co., Transcontinental Air Transport, Inc., Union Oil Co., Vortex Wing Corporation.

This modern hangar at Curtiss Chicago port offers every facility for accommodation, service and repairs.

To executives of any type of business interested in or connected with the aviation industry, we will be glad to send detailed and complete information concerning our present airport developments and future plans.

Kindly address your inquiry to Curtiss-Wright Airports Corporation, 29 West 57th Street, New York City.

Elevated promenades afford aviation enthusiasts at Chicago unique facilities to view all activities.

CURTISS-WRIGHT AIRPORTS

IN NEW YORK AREA: VALLEY STREAM, L. I. • CALDWELL, N. J. • NORTH BEACH, N. Y. C. • HADLEY FIELD, N. J. • LOS ANGELES, CAL. • IN SAN FRANCISCO AREA: ALAMEDA, SAN MATEO • HOUSTON, TEX. • MILWAUKEE, WIS. • CHICAGO, ILL. • ST. LOUIS, MO. • CLEVELAND, O. • PITTSBURGH, PA. • LOUISVILLE, KY. • BALTIMORE, MD.

TREAD

Silent—surefooted—The New Firestone Supreme Balloon grips the road with a scientifically formed tread of extra deep, sharp angled cushions of toughest rubber—insuring the greatest safety and traction ever built into a tire. And beneath this tough, long wearing tread Firestone Gum-Dipped cords, saturated and insulated with rubber, provide the sturdiest, strongest construction known in tire building.

Firestone Gum-Dipped Tires hold all world records for safety, economy, endurance and mileage; the New Firestone Supreme Balloon brings owners of fine cars tire performance above and beyond all previous standards.

Firestone

Supreme Balloon

XUM

First Showing

OF THE NEW DIMENSION

PIERCE

132 HORSEPOWER
AND SILENT GEAR-SHIFT
are among recent notable Pierce-Arrow developments. Gears can be shifted quietly, almost effortlessly, *at any speed.*

THE FIVE-PASSENGER SEDAN OF GROUP B
as photographed in natural colors

THREE NEW GROUPS OF STRAIGHT EIGHTS

Group A: 132 Horsepower . . 144-inch Wheelbase . . . . . $3975 to $6250
Group B: 125 Horsepower . . 134 and 139-inch Wheelbase . . $2975 to $3675
Group C: 115 Horsepower . . 132-inch Wheelbase . . . . . $2595 to $2750

All Prices f. o. b. Buffalo

All models have Silent Gear-shifts . Non-shatterable Glass . Hydraulic Shock Absorbers . Super-safety Brakes . Fender or Bracket Headlamps optional without extra charge . . *Pierce-Arrow Engineering and Coachwork throughout.*

XUM

ARROWS

A brilliant array of America's Finest Motor Cars in four new wheelbases

. . with a new model, slightly smaller, as low as $2595

IN extending its Straight Eight line to meet *every latest demand* of the fine car market, Pierce-Arrow opens the 1930 season with an array of motor cars which again easily qualify as *America's finest.*

There are four new wheelbases in the 1930 group . . all cars of increased inner spaciousness . . all slender, low-swung, graceful creations in the finest Pierce-Arrow tradition.

The slightly smaller car in the new line . . of an inch less wheelbase . . is of true Pierce-Arrow quality throughout. Its low price *($2595 at Buffalo)* gives it extraordinary value.

• • •

THE 1930 colorings and upholsterings and appointments are new elements of beauty, freshly expressed.

There are new door latches, velvet of operation . . new clocks and vanity cases in the ultra-modern manner . . new foot-rests and lights and mirrors which reflect the mode of the hour.

More important, there are engineering developments of vital consideration . . all present in every car of the 1930 line.

• • •

MECHANICALLY, as well as modishly, Pierce-Arrow keeps abreast of the hour. Its improvements are never saved for an occasion, never sensationalized . . although it has pioneered some of the greatest.

So it is that today's Straight Eight line by Pierce-Arrow is possessed of every feature worthy of adoption by America's finest motor car. For example:

Silent gear-shifts . . non-shatterable glass . . super-safety brakes . . low-swung gravity centers . . hydraulic shock absorbers, etc., etc. All Pierce-Arrow features . . each having been added as it proved itself . . and without particular mention or especial acclaim.

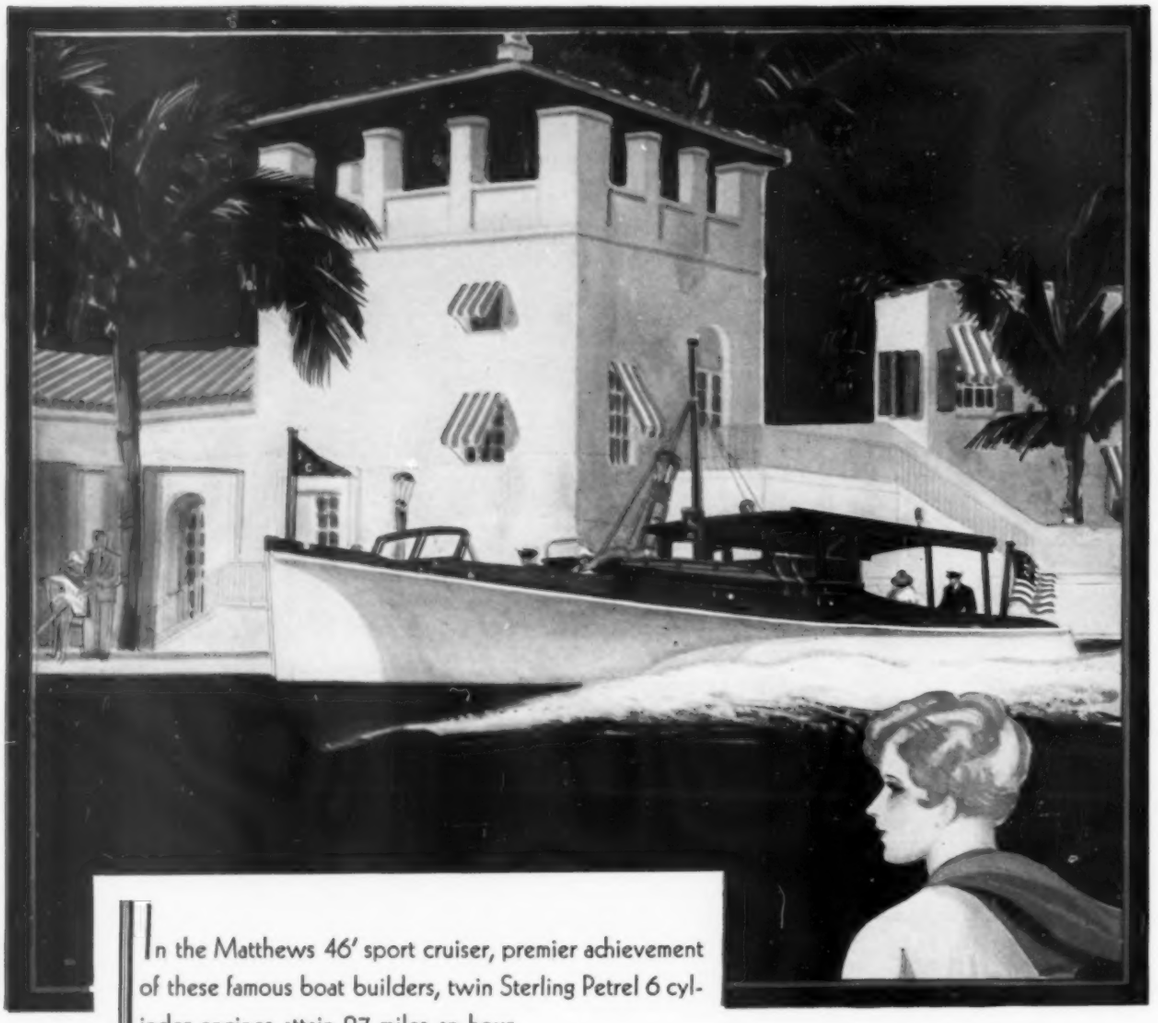
Nor is there any excess of modesty in this attitude. It is simply that *no* new feature, or any *group* of new features, could conceivably be so important as that which is *Pierce-Arrow.* Greater is that than the sum of all its parts.

NEW PIERCE-ARROW PRICES . . *at Buffalo* . . From $2595 to $6250

(Other Custom-built Models up to $10,000)

In the purchase of a car from income, the average allowance on a good used car usually more than covers the initial Pierce-Arrow payment.

XUM



In the Matthews 46' sport cruiser, premier achievement of these famous boat builders, twin Sterling Petrel 6 cylinder engines attain 27 miles an hour.

Compression of the 200 H.P. 2000 R.P.M. model is modified for full speed running at 1800 revolutions, 180 H.P. The great difference in 200 H.P. engines is apparent in this fast cruiser in which the Petrel turns the larger propeller, performing best with cruising load.

You will willingly specify the Petrel if you consider the boat an investment and study the comparitive advantages of this Sterling engine.

• Catalog Gratis •

STERLING ENGINE COMPANY · BUFFALO, N.Y.

Sterling

THE ENGINE OF REFINEMENT

Among those who have been presented with the CROIX DE GUERRE for AMERICAN ACHIEVEMENT

GEN. LINCOLN C. ANDREWS
ADMIRAL W. S. BENSON
MR. HERBERT V. BOOK
MR. E. G. BURKAM
HON. OSCAR E. CARLSTROM
HON. C. M. CHAMBERS
HON. JAMES M. COX
HON. JOHN W. DAVIS
HON. RICHARD P. ERNST
HON. W. J. FIELDS
MR. CLAUDE H. FOSTER
MR. J. B. GRAHAM
JUSTICE SAMUEL J. HARRIS
HON. W. B. HARRISON
MR. EDGAR WATSON HOWE
COL. CHAS. A. LINDBERGH
JUDGE J. WILLIS MARTIN
HON. JOSEPH W. MARTIN, JR.
MR. GRAHAM McNAMEE
MR. C. W. NASH
GENERAL JOHN J. PERSHING
MR. FRANK A. SEIBERLING
MR. CHAS. FULLER STODDARD
HON. W. A. WALSH
MR. JOHN B. WILLIAMS

Here is the first *definite answer* to a problem every business has to face

PROMOTION, of course, is the best means for a business to reward men of unusual merit. But promotion is not possible in every case.

What, then, will supply incentive for greater loyalty and achievement on the part of employes?

There have been many attempts to answer this question. Every year thousands of awards are made—loving cups, traveling equipment, cash bonuses, organization insignia, all prizes without meaning.

All these are proof that every large business needs a definite system of awards!

PRECISION
Trade Mark Reg.
Every Pentagon carries this GRUEN pledge mark, placed only upon watches of finer quality, accuracy and finish. Made only in the Precision workshop

For the first time, such a plan has been worked out.

This plan is based upon a single award, already presented to so many distinguished men that it has won the title of "The Croix de Guerre for American Achievement."

A great deal of publicity has been attached to the various presentations of "The Croix de Guerre for American Achievement," chiefly because of the type of men who have received it, as indicated by the list above.

The number of people who recognize it *as an award for merit* is therefore already considerable and is rapidly increasing. It is this one fact which makes "The Croix de Guerre for American Achievement" the perfect foundation for your own plan of awards.

"The Croix de Guerre for American Achievement" is the Gruen Pentagon Watch. How it has won its present standing in the public esteem is perhaps explained by the qualities of the watch itself.

It is first of all unique. Its patented shape identifies it immediately wherever it is seen. It is known as a watch of unusually high quality, and because its shape is so distinctive and so rigidly protected against imitation, it cannot be confused with any other timepiece.

The book shown in the illustration above is a complete outline of the award plan based upon "The Croix de Guerre for American Achievement."

The coupon at the right, with your name and address, will bring it to you by return mail.

You may wish, also, to see "The Croix de Guerre for American Achievement." New Classified Telephone Directories being issued will list under "Gruen Guild Watches" the Gruen jeweler nearest you. He has a variety of Gruen Pentagon models to show you, ranging in price from $75 to $2500—including the Paladin model at $250.

GRUEN WATCH MAKERS GUILD
TIME HILL, CINCINNATI, U. S. A.
Branches in various parts of the world
Engaged in the art of making fine watches for more than half a century

As new Classified Telephone Directories are issued, you will find under "Gruen Guild Watches" the name of your nearest Gruen jeweler. His store is marked by this Gruen Service emblem

GRUEN WATCH MAKERS GUILD
TIME HILL, CINCINNATI, U. S. A.
Please send me a copy of your Presentation book for "The Croix de Guerre for American Achievement."

Name.....
Title.....
Firm name.....
Address.....

NOW... Tell Your Sales Story in 16 mm. Sound Movies with the New Portable Project-O-Phone—*"Vocalizes as it Visualizes"*

HERALDED months ago as a future "possibility," 16 mm. synchronized sound movies for business use are here...and here to stay, with the amazing new portable Project-O-Phone.

Utilizing a highly perfected recording disc system coupled to the Filmo Business Projector, the Project-O-Phone successfully presents your complete sales story in synchronized sound movies. Executives may now appear "in person" before their ultimate consumers or the largest of dealer or distributor organizations — without leaving their offices, yet giving their messages the vital force of their own voice and personalities.

And this is only the beginning! Better than a trip through your factory or sales school are 16 mm. synchronized sound movies with Project-O-Phone; for you can carry your product, your factory or your school to the prospect, user or dealer, at an enormous saving in cost and at a tremendous gain in the effectiveness of the story. For conventions, exhibits, sales meetings, and in sales training schools, Project-O-Phone is today's answer to today's need for more effective selling methods.

Practical . . . Positive . . . Portable

The Project-O-Phone's basic principle is the synchronization of two separate motors, one for the reproducing turntable and one for the projector, by positive mechanical coupling. It is this highly perfected control which permits exact and constant synchronization of sound and picture.

The sound is reproduced electrically through an ordinary radio audio system and a dynamic loud speaker. Any radio shop can service these elements if service should ever be needed. And should the precise, trouble-free and simple Filmo Business Projector, which composes the projection part of the Project-O-Phone, require any attention, Bell & Howell dealers are located everywhere.

Thoroughly proved as a mechanical and electrical unit, Project-O-Phone is further practical because of its portability. Three cases only are required for transportation, each easy to carry and all three easily stowed away in half of the back seat of an auto.

There is a film producing and recording laboratory near you equipped to put your sales message or visual-sound demonstration into synchronized sound movies for Project-O-Phone. Or your present 35 or 16 mm. film may be given a sound counterpart just as easily. Write to us and we will send you the name of the Filmo dealer and cooperating laboratory nearest you, also further information regarding the new Portable Project-O-Phone.

BELL & HOWELL
Filmo

BELL & HOWELL CO., Dept. N, 1818 Larchmont Ave., Chicago, Ill. New York, Hollywood, London (B & H Co., Ltd.) Established 1907

UNITED FORTUNES

THE fundamental principle of chain-hotel operation is expressed in the familiar sentiment, "One for all and all for one." Or, to put it in a single word—Cooperation. The same sound business methods which have proved effectual in other industrial fields—such as steel, automobiles, stores—govern with equal efficacy the operation of the modern hotel system. Centralized control and supervision—volume purchase of supplies—systemized forms for auditing and accounting—opportunities afforded for comparative checking of operating costs—these are a few of the more obvious advantages enjoyed by the chain hotel over the unattached hotel.

We cannot, of course, standardize in good manners, in courtesy and in all the other impalpable, though indispensable, elements which are represented in the term "Service." Such factors are very largely individual. But we *can* select our individuals, we *can* inspire them and lay down for their guidance a code of practice, such as is represented in our series of United Manuals. We can also, by reason of our size and diversity of operation, offer to deserving employees opportunities for advancement which no single hotel can possibly present.

Our own progress is governed solely by the measure of our success in translating these principles and practices into terms of service for the benefit of the public.

FRANK A. DUDLEY, *Pres.*

THE WORLD'S LARGEST HOTEL SYSTEM

New York City	The Roosevelt
Philadelphia, Pa.	The Benjamin Franklin
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Worcester, Mass.	The Bancroft
Newark, N. J.	The Robert Treat
Paterson, N. J.	The Alexander Hamilton
Trenton, N. J.	The Stacy-Trent
Harrisburg, Pa.	The Penn-Harris
Albany, N. Y.	The Ten Eyck
Syracuse, N. Y.	The Onondaga
Rochester, N. Y.	The Seneca
Niagara Falls, N.Y.	The Niagara
Erie, Pa.	The Lawrence
Akron, Ohio	The Portage
Flint, Mich.	The Durant
Kansas City, Mo.	The President
Tucson, Arizona	El Conquistador
(Nov. to April inclusive)	
Montreal, Canada	The Mount Royal
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Niagara Falls, Canada	The Clifton*
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SOUTH MICHIGAN AVENUE AND THE LAKE FRONT
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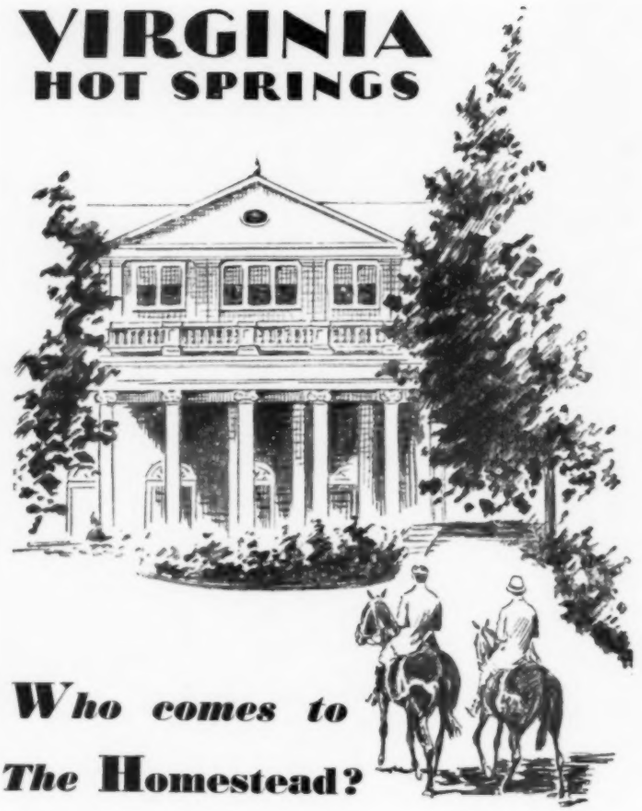
the only resort in America where the famous Nauheim treatments for the heart are given with a natural calcium chloride brine—as at Bad Nauheim itself. *Address* MR. WM. M. LEFFINGWELL, President, The Glen Springs, Watkins Glen, N.Y.

THE AMERICAN NAUHEIM

VIRGINIA HOT SPRINGS



Who comes to The Homestead?

THE life here is many-sided. In the social columns one sees throughout the year the names of prominent persons who choose The Homestead for their holidays.

These and other guests come to The Homestead not only because it is one of the country's foremost hotels, but also because here they find unequalled opportunity for sports. Three golf courses, many excellent tennis courts, 200 fine saddle horses, bathing, and numerous scenic trails for mountain climbers and hikers, are among the popular diversions available. And, of course, dancing, concerts and clever entertainments.

And many persons come here for the benefits of the baths and treatments which are made possible by our location at the renowned Virginia Hot Springs. Not a sanitarium, The Homestead nevertheless gives its guests every advantage of the efficacious spring water, in the form of special treatments and hot baths, to which may be added our own treatments of massage and electricity. If desired, our staff of capable physicians will examine, diagnose or prescribe. The environment is ideal for what is known as a "rest cure."

Thus The Homestead offers every expected comfort and luxury of one of the world's very finest resort hotels, plus unusually complete sport facilities, and the unique benefits of the Hot Springs for those who require them. The climate is delightful the year round. A very interesting booklet will be forwarded you upon request. Kindly address Christian S. Andersen, Resident Manager.

Reservations and transportation from New York may be secured from the Virginia Hot Springs office in the Ritz-Carlton.

The HOMESTEAD
Hot Springs Virginia

Summer Temperature Averages 66°

Introducing

the Moderate Rate

Into Modern Hotel Luxury

APPRECIATION is complete when you learn the extremely moderate rates at the Hotel Lexington. The luxury of its appointments, the perfection of its French cuisine, the convenience of its location leave nothing else to be desired.

Maitre Dave Bernie and his Lexington Minute Men Play at both Dinner and Supper. No Cowert at Dinner

801 ROOMS. Each with private bath (tub and shower), circulating ice water, mirror door.

341 with double beds. 1 person $4, two ----$5
229 with twin beds. Either 1 or 2 persons ----$6
231 with twin beds. Either 1 or 2 persons ----$7

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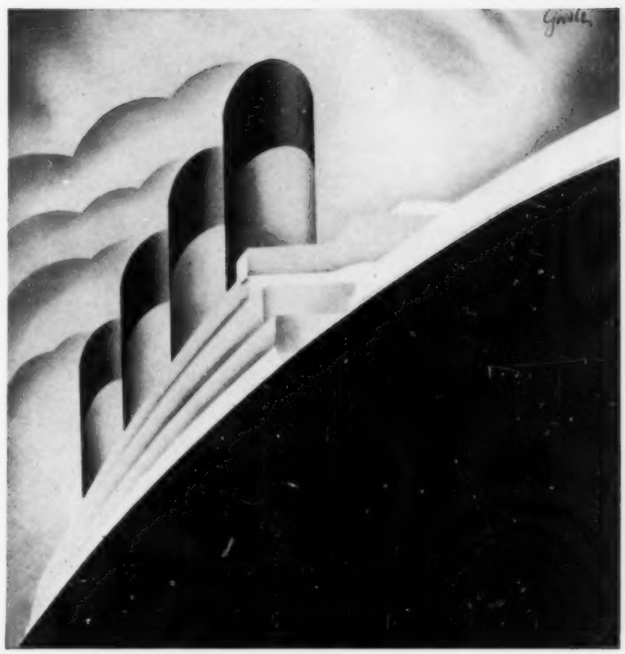
Lexington Ave. at 48th St. New York City

Frank Gregson, Mgr. Phone MURray Hill 7400

Direction of American Hotels Corporation J. Leslie Kincaid, President



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CANADIAN NATIONAL — TO EVERYWHERE IN CANADA

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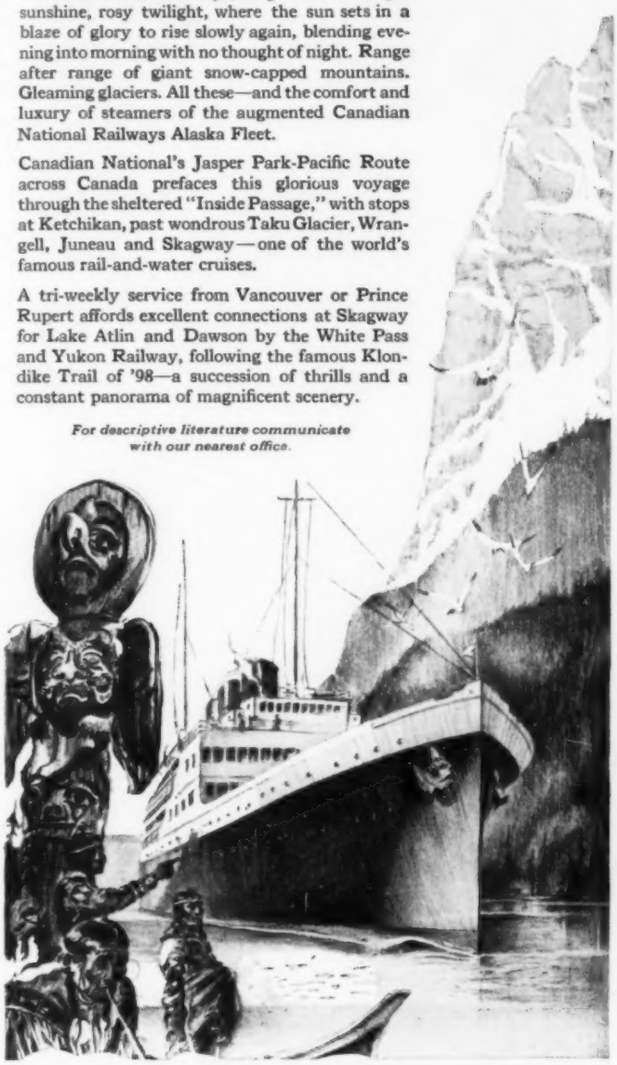
Land of Romance— Charm and Mystery

. . . Mellow summer days, long hours of bright sunshine, rosy twilight, where the sun sets in a blaze of glory to rise slowly again, blending evening into morning with no thought of night. Range after range of giant snow-capped mountains. Gleaming glaciers. All these—and the comfort and luxury of steamers of the augmented Canadian National Railways Alaska Fleet.

Canadian National's Jasper Park-Pacific Route across Canada prefaces this glorious voyage through the sheltered "Inside Passage," with stops at Ketchikan, past wondrous Taku Glacier, Wrangell, Juneau and Skagway—one of the world's famous rail-and-water cruises.

A tri-weekly service from Vancouver or Prince Rupert affords excellent connections at Skagway for Lake Atlin and Dawson by the White Pass and Yukon Railway, following the famous Klondike Trail of '98—a succession of thrills and a constant panorama of magnificent scenery.

For descriptive literature communicate with our nearest office.



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The splendor of the Louis' in its magnificent salons

New Salon Mixte with illuminated glass dancing floor of the "Paris"

S. S. "Paris"
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FROM the days of the Louis', France has given the world its standards of elegance and chic . . . clothes, manners, menus, the *bon mot* and the art of fascination . . . cross "the longest gangplank in the world" to the **New "Paris"** . . . [just re-engined for speed . . . redecorated for smartness and modernity . . . a crystal smoking room . . . sun deck with sidewalk café . . . practically all outside rooms with bath] . . . and you're in Paris herself . . . the same gracious service, the same brilliant backgrounds . . . the same gayety, the same infinite finesse.

Five and a half days to Plymouth, England

Sail from the heart of Manhattan on one of the weekly express liners *"Ile de France"*, *"Paris,"* or *"France"* . . . direct to Plymouth, a waiting Pullman express for London, a few hours later the covered pier at Havre, three-hour express to Paris.

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The finest Steed is for the Guest

we offer the All-Pullman

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first among the transcontinentals, in welcoming you to the Northwest—
the country pioneered, developed and served by the

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Your Host in NORTHERN PACIFIC the Northwest

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GOLF COURSE

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VIGOROUS OUT-OF-DOOR LIFE IN THIS GORGEOUS MOUNTAIN SETTING

Spend a week... or a month... or all summer at Banff in the Canadian Rockies. Play golf on the dramatic, new golf course... 18 holes, 6640 yards, first drive smack across the Spray River... bent-grass greens and well-turfed fairways ... 19th hole a new $100,000 club-house overlooking Bow Falls. Swim in the magnificent pools... you may choose between the warm one fed from the sulphur springs, and the cold freshwater one. Play tennis on one of the four *en tout cas* courts. Canter smoothly along bridle paths in the spruces... or ramble up mountain trails on sure-footed trail-horses. Motor, fish, boat as you will... there are all sports at Banff. And at night, dance in the smart ballroom to the vivid rhythms of a good orchestra. Always something new to do, something new to see... and always the perfection of existence in the big, castle-like hotel, keyed to the tastes of world-travelled people in every detail of physical comfort and artistic charm.

Information from *Banff Springs Hotel, Banff, Alberta, Canada,* or any Canadian Pacific Office: New York, Chicago, Atlanta, Boston, Buffalo, Cincinnati, Cleveland, Dallas, Detroit, Indianapolis, Kansas City, Los Angeles, Memphis, Minneapolis, Omaha, Philadelphia, Pittsburgh, Portland, San Francisco, St. Louis, Seattle, Tacoma, Washington. In Canada: Montreal, Nelson, North Bay, Ottawa, Québec, Saint John, Toronto, Vancouver, Victoria, Winnipeg.

BANFF SPRINGS . . . . . A CANADIAN PACIFIC HOTEL

XUM

HAWAII « «Where Spring Comes In South Sea Glory

SPRING IN HAWAII! The loveliest Spring you have ever known! Enchantment enfolds you while the Paradise Isles are still faint tracings on a golden horizon. The wonder of a new world dawns as your liner cleaves the foam. Dazzling scapes of land and sea succeed each other to make the spell complete long before you glide by Waikiki and moving Hawaiian melodies drift out to you on fragrant winds to extend a hospitable land's "Aloha."

¶Spring in Hawaii! A time when a burnished sky looks down on a world of glowing color. The pastel tints of dawn, the glorious shifting hues of Hawaiian sunset are reflected in myriad tropic gardens, splashed over gorgeous flame-trees tossing manes of fire in groves of new-washed green. The breath of ginger blossoms comes down from verdant mountain sides and mingles forest incense with the perfumes of countless oleanders.

¶Spring in Hawaii! When May Day becomes Lei Day and a joyous people express their love and friendship with fragrant South Sea garlands ' ' ' when honeymooners wander forest aisles or dream by coral beaches ' ' ' when visitors from other climes marvel at the cool delight of a climate that retains its winter comforts and adds a million vernal glories.

¶Spring in Hawaii! Make your plans to go this year. March is not too early. The vivid colors of Winter are merging with the golds and reds of Summer. Great liners glide over sun-smoothed seas in four to six days from the four gateways of the Pacific according to the ship selected. They defer to none in luxury or service. Sailings every few days offer every advantage of time and convenience. Write for detailed information.

~

¶You do not have to bother with passports or other formalities. Hawaii is an integral part of the United States—as much so as your own State.

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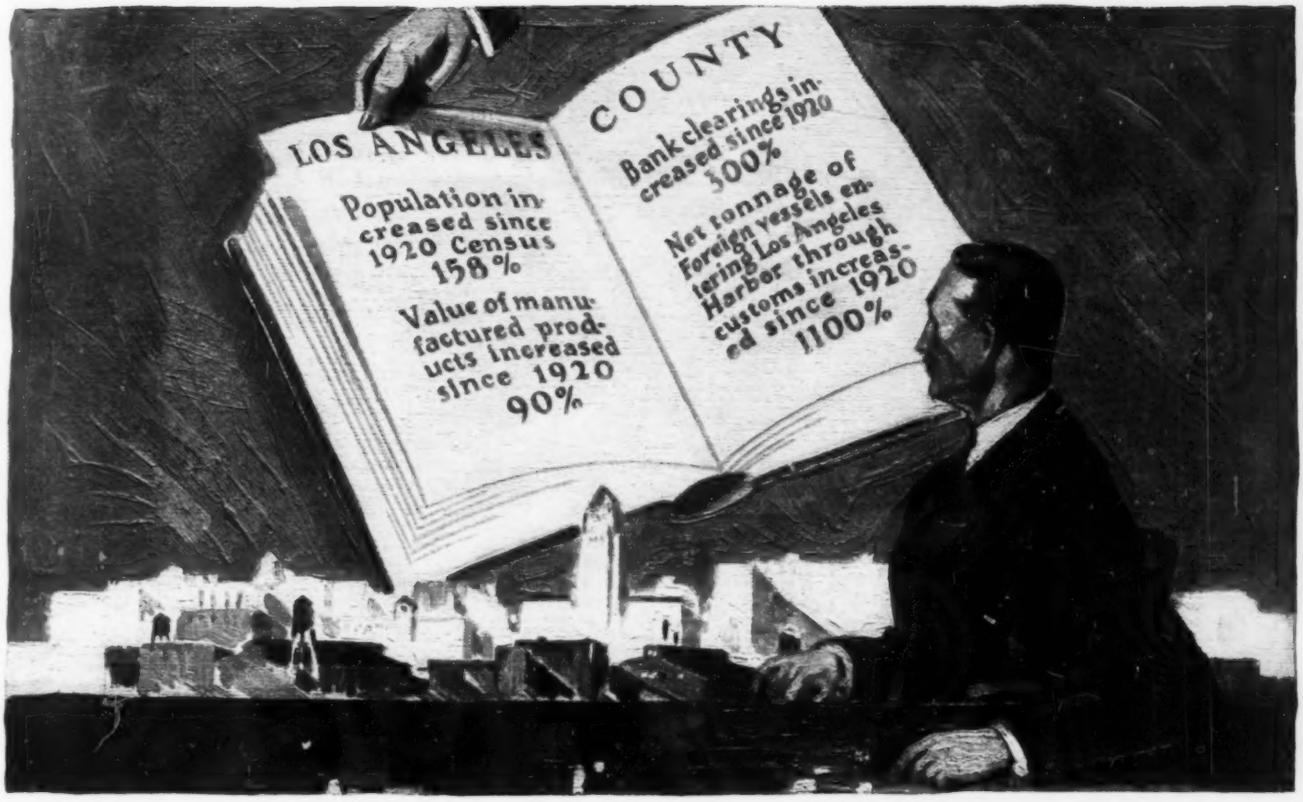
140 So. Dearborn - - - Chicago
685 Market St. - - San Francisco
609 Thomas Bldg. - Dallas, Texas
213 E. Broadway - San Diego, Cal.

Any travel agent will gladly give you full particulars and arrange your bookings


LOS ANGELES
Population increased since 1920 Census 158%
Value of manufactured products increased since 1920 90%
COUNTY
Bank clearings increased since 1920 300%
Net tonnage of Foreign vessels entering Los Angeles Harbor through customs increased since 1920 1100%

A RECORD OF DEVELOPMENT
UNSURPASSED IN HISTORY

The most efficient distribution center of the Pacific Coast and of the Far West.

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Industrial Power Rates with load factor discount, as low as ¾c per K.W. Hour.

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Natural Gas at 20c per million B.T.U's. Oil at 16½c per million B.T.U's.

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Abundant Open Shop Contented Labor

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Low Building Costs and maintenance and high labor efficiency due to mild climate.

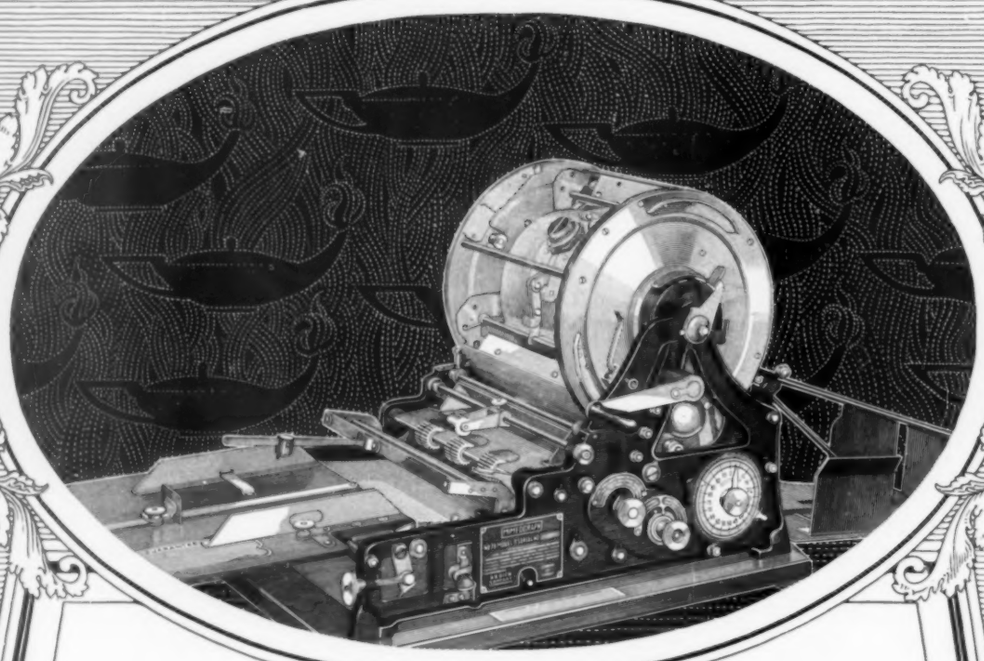
JUST so long as Southern California continues to enjoy its delightful year 'round equable climate, and other living advantages; and just so long as human nature remains as it always has been . . . people will continue to flock to Los Angeles County.

It is but necessary to study indices of the past to see that this area must inevitably become one of the greatest consumer markets of the world. Today, it is by far the largest *concentrated* market on the Pacific Coast. And it is substantially increasing its lead every year.

Industrialists who are entrusted with the destinies of great manufacturing plants and who must consider the economics of production, distribution and markets, are bound to realize the importance and the good business of locating plants in Los Angeles County to serve this great metropolitan area . . . and the whole Pacific Coast . . . and to develop the tremendous virgin export markets of the Far East.

Inquiries are invited regarding manufacturing and market advantages and opportunities in Los Angeles County. Address:
INDUSTRIAL DEPT. LOS ANGELES CHAMBER OF COMMERCE.

Industrial LOS ANGELES COUNTY



NEW YEAR LIGHT

The new year means little or nothing if it does not bring new ideas. There are many business and educational institutions in America that are not getting needed help from the Mimeograph and thereby are neglecting the opportunity to make telling use of thousands of new ideas—for immediate profit. The unrivalled ability of this clever device to establish speedy communication, by the exact duplication of letters, forms, sketches, maps, diagrams, questionnaires, etc., enables it to reach out for new markets and strengthen organizations. Almost as quickly as an idea is conceived it can be typed on the stencil sheet and nicely duplicated in unlimited thousands. The Mimeograph needs no experience to handle. It assures privacy. It operates at a very low cost. It is an idea disseminator. Write today for full particulars, which are almost sure to bring you new ideas about your business, from A. B. Dick Company, Chicago, or from branch office in any principal city.

M I M E O G R A P H

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Dissonances

"YE MEN of America, methinks ye are in many ways too materialistic."—St. Paul the Apostle, as paraphrased by Myron C. Taylor

"It is an operative fact that Philosophy has to accept the controlling role of technological industry in contemporary civilization." —John Dewey

"There is no country in the world so efficiently governed as the American Telephone & Telegraph Co." —Ernest Elmo Calkins

"One thing alone is absolutely certain of the future: that our Western societies will not long persist in their present state." —Bertrand Russell

"Success—'the bitch goddess, Success,' in William James' phrase—demands strange sacrifices from those who worship her." —Aldous Huxley

"Pericles decreed that every Athenian might own five slaves—you [any American] have at your command the equivalent of 1,000." —Julius Klein

"Business—the oldest of the arts and the newest of the professions." —A. Lawrence Lowell

"I am naturally in sympathy with any effort that emphasizes not merely the power but the beauty of business as we practice it." —Darwin P. Kingsley

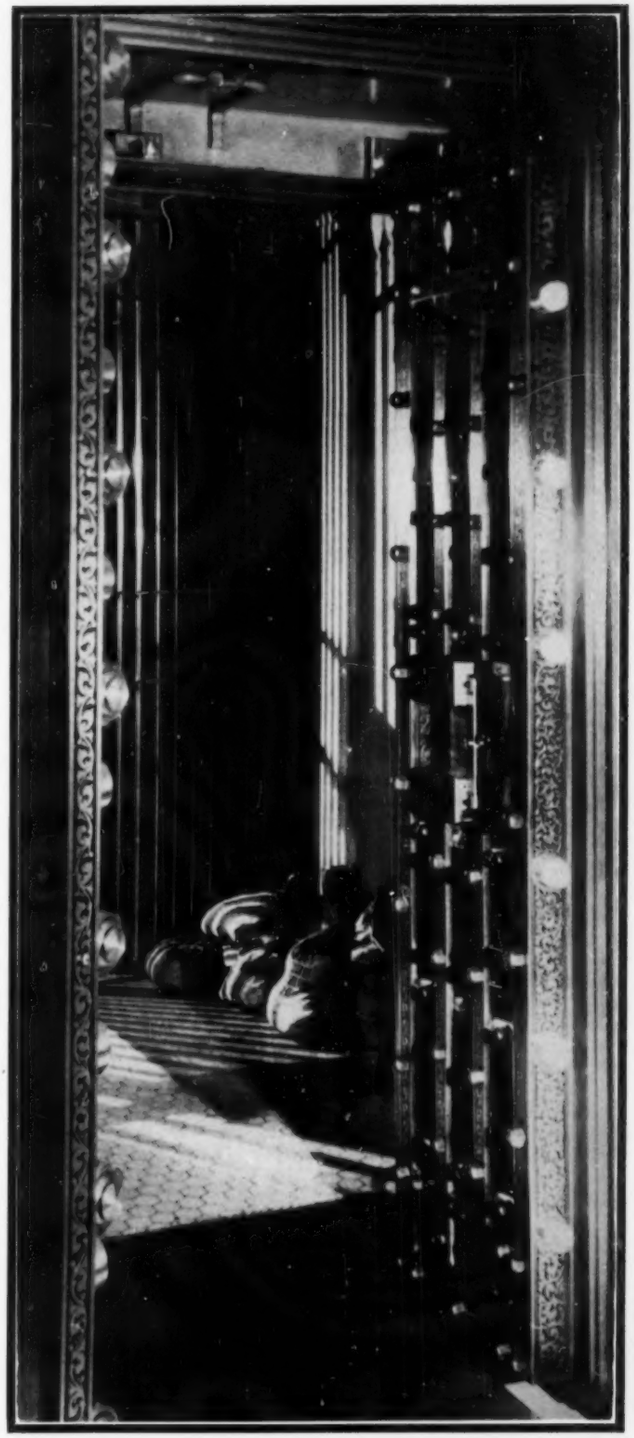
"The history of business remains obscure because those who followed in the footsteps of Gibbon and Carlyle were prone to give more attention to the titled ruler of a little principality or the petty politician of Buncome County than to the great captain of industry who takes the whole world for his realm." —Charles A. and Mary Ritter Beard

"Big business has come as the result of irresistible economic forces . . . The social perils that it has brought in its train are becoming more apparent every day and they are bound to multiply." —Paul D. Cravath

"I think we are in the presence of a new era in the organization of industry and commerce pregnant with infinite possibilities of moral progress." —Herbert Hoover

"Business men have the effective control over the mechanisms produced by science and therefore responsibility for the type of control exercised—the scientist himself has no control over the results of his thinking." —Wallace B. Donham

"The machine is the authentically embodied Logos of modern life." —John Dewey



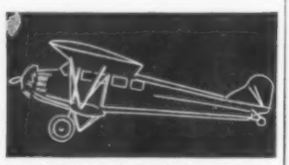
Modern treasure, like ancient treasure, is guarded by dragons and fortresses. Most terrifying to modern seekers of treasure (cracksmen) is the protecting dragon of electricity; most formidable of fortresses are vaults like this (Central United National Bank of Cleveland). The latest thing in vaults are those of the Chase National Bank, in which repose some cash, much paper, the total value at about $4,000,000,000. Their doors are so precisely balanced on ball-bearing hinges that 38 tons of dead weight can be moved with one finger. The vaults rest on bed rock below sea level.

This BUSINESS UP ABOVE

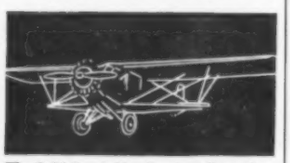
. . . there is money in the clouds

We live in an era of big business and intense activity. Time has become a priceless commodity. The executive who would utilize his precious moments to their fullest advantage . . . flies. Not because it is "the thing to do." He flies because the mature consideration of cold figures shows him that air travel is a vital part of business today. Likewise, he invests in an airplane, either for his own or for corporate use, on a similar basis of fact and figures. The Buhl line of Airsedans is created on sound business fundamentals of flying. Absolute safety is sacrificed to no other consideration whatever; comfort and economy are emphasized to the greatest extent consistent with safety; speed is a variable factor dependent upon the choice of engine. Here is the ideal choice for "this business up above."

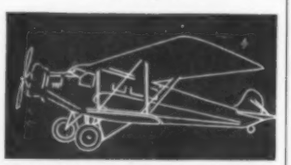
The plane illustrated is the Buhl Standard Airsedan which recently completed the first non-stop, refueling flight from coast to coast and back again.



The Buhl Standard Airsedan is a six-place, dual control plane, powered with the new J-6 Wright Whirlwind engine.



The Buhl Sport Airsedan is a three-place plane with dual dep controls powered with either the J-5 or J-6 Wright Whirlwind engine.



The Buhl Senior Airsedan is an eight-place dual control plane, powered with a Wright Cyclone engine.

BUHL AIRCRAFT COMPANY
MARYSVILLE, MICH.

Buhl Air Sedans
SENIOR · STANDARD · SPORT

Off the Record

Tag

ONE stormy Sunday Mr. Edward F. Hutton, of the powerful Stock Exchange house which bears his name, sat on the verandah of a shooting club whose members he had displeased by breaking the rules against shooting on the Sabbath. To the group came the club guide, excitedly telling of a great flock of wild turkeys on the club grounds. One by one each member declined to go after them until Mr. Hutton was questioned. Quickly he rushed in, donned his gay shooting togs, grabbed his gun. Warily the guide led him through thickets, into slippery gullies, under hedges that demanded belly-crawling in the slithery mud. Finally the flock of strutting turkeys was spied. Bedraggled Mr. Hutton fired his gun —corn shot from the muzzle. Realizing the club members had played a prank upon him, he leaped at the nearest fowl, grasped it in his muddy hands. On the leg was a tag reading "To E. F. Hutton, 61 Broadway, New York."

Insullficiencies

Mr. Samuel Insull has a farm of his own at Libertyville, forty miles north of Chicago. There he eats, sleeps, rises at six-thirty and does other things a man approaching seventy finds it reasonable to do. A few miles away at Mundelein, Mr. Samuel Insull in his guise of Public Service Company of Northern Illinois has a second farm. At his second farm he neither eats nor sleeps nor rises. He rarely appears. His second farm is an exhibit. There Mr. Samuel Insull, *qua* Public Service Company of Northern Illinois, shows twenty or thirty thousand people every year how agriculture can be made to pay. In a model, cement-floored, metal-stanchioned barn install a De Laval Milking Machine ($493.00), a Prater Feed Grinder ($290.00), numerous light bulbs and the requisite amount of wire; in a 19 x 21 foot, half-monitor type chicken house hang three 100 watt lamps and two ten watt lamps capable of creating the illusion of daylight in a hen's egg duct thirteen hours out of twenty-four (fourteen hours would weaken the constitution of the hens); in a clean, white dairy cooling room set up a No. 3 Bestov milk aerator ($66.00) and a Leitner Storage Tank ($250.00); in the neighboring dairy wash room plant a motor to operate them, a 2 h.p. high pressure gas-fired Kane boiler, a Frigidaire Cooling Unit ($340.00) and a circulating pump ($48.00); arrange the brooder house with a Never-Fail time switch ($18.50) and electric brooders from $29.50 to $110.00; garnish the Hog House with an electric water pump and an electric elevator for hoisting grain; install in the farmhouse electric or gas heaters, stoves, washers, wringers, ironers, dryers, dishwashers, vacuum-cleaners, refrigerators; connect the whole system with the feed lines of the Public Service Company of Northern Illinois which is constructing rural leads to meet that very need—and the estimated needs of the next half century; and turn the switch.

It is true that Mr. Samuel Insull's second farm loses money. That however is to be expected. The electric installation is extraordinarily complete. And it cost a hundred thousand dollars to begin with. Also it is not to be judged as other farms. Its principal crop is farmers. Eight hundred asked the Public Service Company for new electrical connections in 1928 and fifteen hundred in 1929—many of them after an inspection of the farm. Its secondary crop is questions. Not by farmers. A lady asked the guide and electrician how they bred their stock . . .

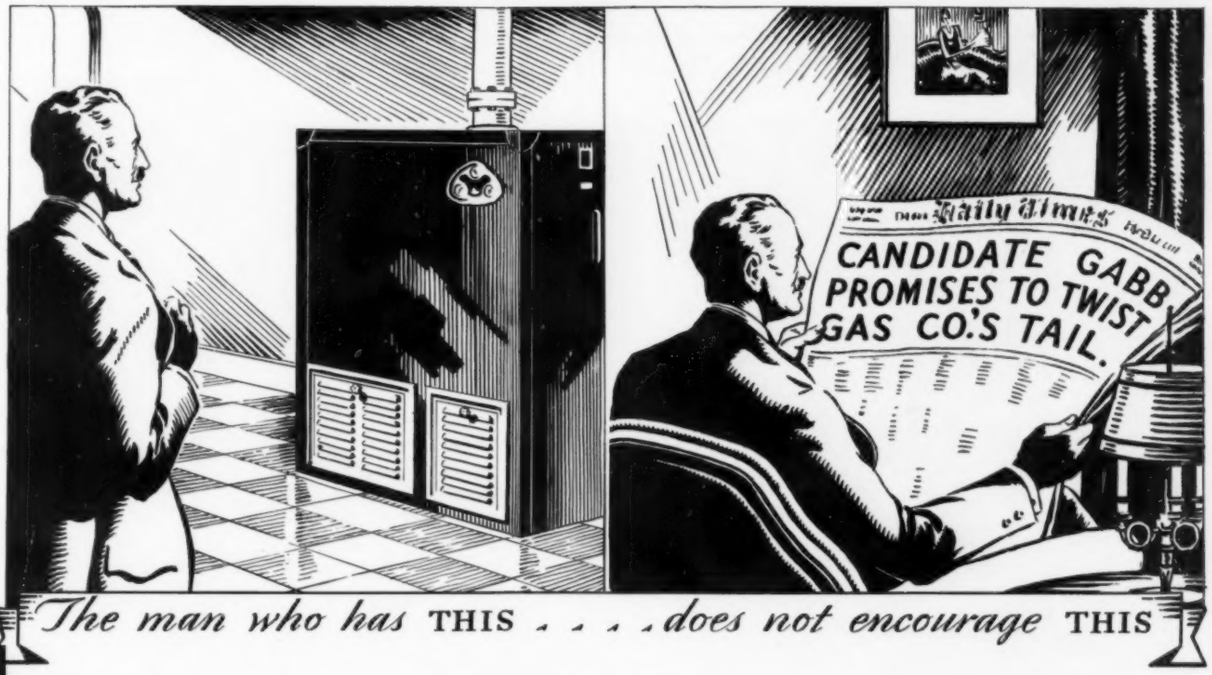
Dynamic Mr. Fisher

Professor Irving Fisher, Yale's great economist, sleeps in an electric bed. Ganglia of electrically lighted tubes surround it. From these emanate rays almost as invigorating as the sun's. To keep the Fisher body cool there is an air cooling device.

At his desk Prof. Fisher sits in an electric chair which does not shock, but merely titillates. Most of his twenty-seven assistants have tried it at one or another time, but never the negro office porter.

Prof. Fisher hates to waste time. Two summers ago when he sailed for Europe he dictated to a stenographer the while his taxicab careened to the pier. He dictated throughout the trip. While he flew from Paris to Nice he wrote a letter to his wife. He drives at sixty miles an hour whenever he can and has never been in an accident. New Haven cops consider him New Haven's best driver. He is owner and operator of a financial newspaper article syndicate which at present is losing

[*Continued on page 28*]



The man who has **THIS** . . . . *does not encourage* **THIS**

FORESTALLING THE DEMAGOGUE

There was a day when popular acclaim was assured to that political demagogue who could cry loudest the sure-fire slogan ..."Down With the Gas Barons!"

The wiser demagogues today do not raise that cry. They know that influential voters are linked to the Gas Company in two ways . . . as shareholders and as gas heating customers.

The discriminating citizen realizes that the surest way to safeguard his investment, and at the same time make possible more and more favorable rates, is to:

1. Discourage political attacks on the Gas Company and thus avert expensive litigation.
2. Assist the Gas Company to gain increased volume by helping it secure the house-heating business of his friends.

The demagogue offers no program so certain of success as this simple recipe for co-operation.

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Outfitters to Gentlemen · Established 1886

MADISON AVENUE AT 46 STREET

New York

money. But in time, he believes, it will pay for itself. Prof. Fisher is 62.

Brush Family

Matthew Chauncey Brush is a director of some 50 companies, and has an investment trust. All day long he makes money not only for himself and his companies but for his office boy, elevator boy and many another of his employees whose investments he manages. At night he goes home to his apartment in West 40th Street, Manhattan. There is no little wife to welcome him, but there are herds of elephants, ivory elephants, ebony elephants, bronze elephants, iron elephants, marble elephants, silver elephants, gold elephants, elephants of all the rarer stones, sizes and conditions.

All his family affections are lavished upon elephants. This has its advantages for a large-hearted man, since in this country he could have only one wife, but he may and does possess over twenty-two hundred elephants. Those which he cannot adequately stable in his apartment are handsomely taken care of in an up-to-date storage warehouse. The only kind of elephant that he does not own is a living elephant.

Nevertheless, Matt Brush's affections extend beyond his immediate family of elephants. Every year when the circus is in town he hires a box and at least once a week takes a party of his friends to that elephantine entertainment. He always visits the private apartments of the elephant performers, a thing which only one other great lover of elephants regularly does. The other is ex-Governor Smith.

Whereas Mr. Smith is rather timid with his friends, Matt Brush is on much more intimate terms with them. On every visit he has Babe, his favorite Ringling-Barnum & Bailey she-elephant, brought from her couch to dally with him. In pity for her, whom her admirers feed all day long on peanuts, he brings instead a bag of bread and carrots, which she eats from his hand.

Sometimes instead of going to the elephants, the elephants come to him. Four years ago he gave a dinner on the roof of the Waldorf-Astoria Hotel. Two elephants were brought up in elevators to entertain him and his guests. A steel ring was set up and not only the elephants, but lions, clowns, horses, and side-show freaks appeared to give a complete performance for his benefit.

Edibilia

To Mr. James N. Gamble, of Procter & Gamble Co., is served each day one special dish. It is called "graveyard stew", and consists of a bowl of applesauce, into which graham crackers are broken, and upon which is poured a pint of milk.

To Sir Henry Thornton, brilliantly successful and recently reappointed director of the Canadian National Railways, is served each day one special dish. It is called caviar, and consists of the eggs of sturgeon, reclaimed from the Baltic Sea and shipped, by Slavs who do not like them, to Anglo-Saxons, who do.

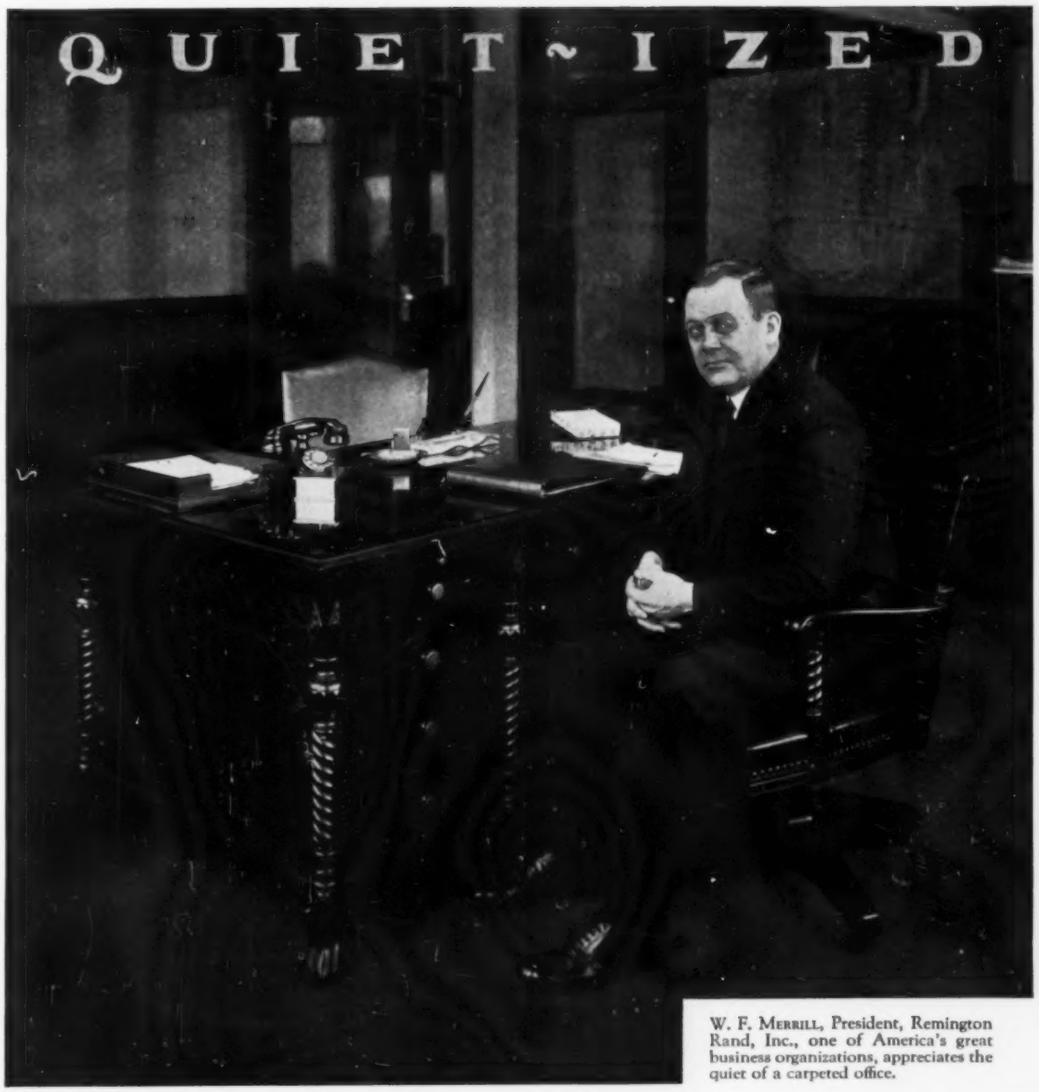
Rich Mormon

It would be practically impossible to engage in any sort of legitimate business in Utah without running into Heber Jedediah Grant. His name has gone forth in the land of the Latter Day Saints. One can hardly pick up a Utah business letterhead without finding "Heber J. Grant" engraved somewhere on it. He is President of the Utah State National Bank, of the Zion City Savings Bank & Trust Co., of the Utah Home Fire Insurance Co., of the Zions Cooperative Mercantile Institute (the R. H. Macy of Salt Lake City), and, of course, of the Heber J. Grant & Co. He is a trustee of *The Desert News*, a director of the Beneficial Life Insurance Co. He is chairman of the board of the Utah-Idaho Sugar Co., which owns 24,539 acres of farm lands. He is at the head of the company owning the Hotel Utah.

But the local renown of Heber Jedediah Grant rests on none of these positions. To the people of Utah his name is mighty because he has long been President of the Mormon Church, or, as its members prefer to call it, the Church of Jesus Christ of Latter Day Saints. Unlike other American religious bodies, the Mormon Church is wealthy. Every Saint is supposed to contribute to the Church one-tenth of his earnings, a tithe of mediæval fatness. Most Saints are good business men, and so the Church has an annual income estimated at $20,000,000. This is used for missionary work and to take care of such Saints as are *not* good business men. The surplus is invested, with two strings attached; the enterprise must be "for the good of the people," and it must be sound.

[*Continued on page 34*]

QUIET~IZED



W. F. Merrill, President, Remington Rand, Inc., one of America's great business organizations, appreciates the quiet of a carpeted office.

THE world owes a lasting debt to Quietness. Accomplishment has always come through silence.

You spend from six to eight hours in your offices every working day. Have you ever thought what undisturbed quietness can mean to you there? It can increase the value of your time by making concentration possible—and productive. It can save your nervous energy to spend constructively. It can *make* you think things through—not only you personally, but all your important executives and department heads who are also paid to think.

Carpets can give you this "concentrative" quietness in your offices as nothing else can. They deaden the clump and click of heels, and much more. They do what no other floor surfacing can do. They *absorb*, blotter-like, indirect noise—the shriek of motor horns, the buzz and clatter of men and machines.

The Mohawk Carpet Mills has fabrics that will *quiet-ize* your offices. Its 23-color range of Broadloom carpets is ideal for office use, combining soft beauty with the economy of long wear—and endless Quiet. There is a Mohawk dealer in your city, equipped to serve you. Call upon him.

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longer wear
more comfort
greater beauty

are to be expected of Stedman Reinforced Rubber Tile Floors. Through a scientific process of manufacture new rubber is adapted to resist wear, to retain the firm resilience that absorbs shock and deadens sound; to ever present a smooth, lustrous surface, impervious and sanitary, characterized by natural color mottlings of unusual fineness and beauty. Produced and laid by experts to meet the practical and decorative needs of each installation. A book describing the Stedman Process and showing installations, with a large number of pattern suggestions in full color, will be sent free on request. STEDMAN PRODUCTS COMPANY, SOUTH BRAINTREE, MASS.

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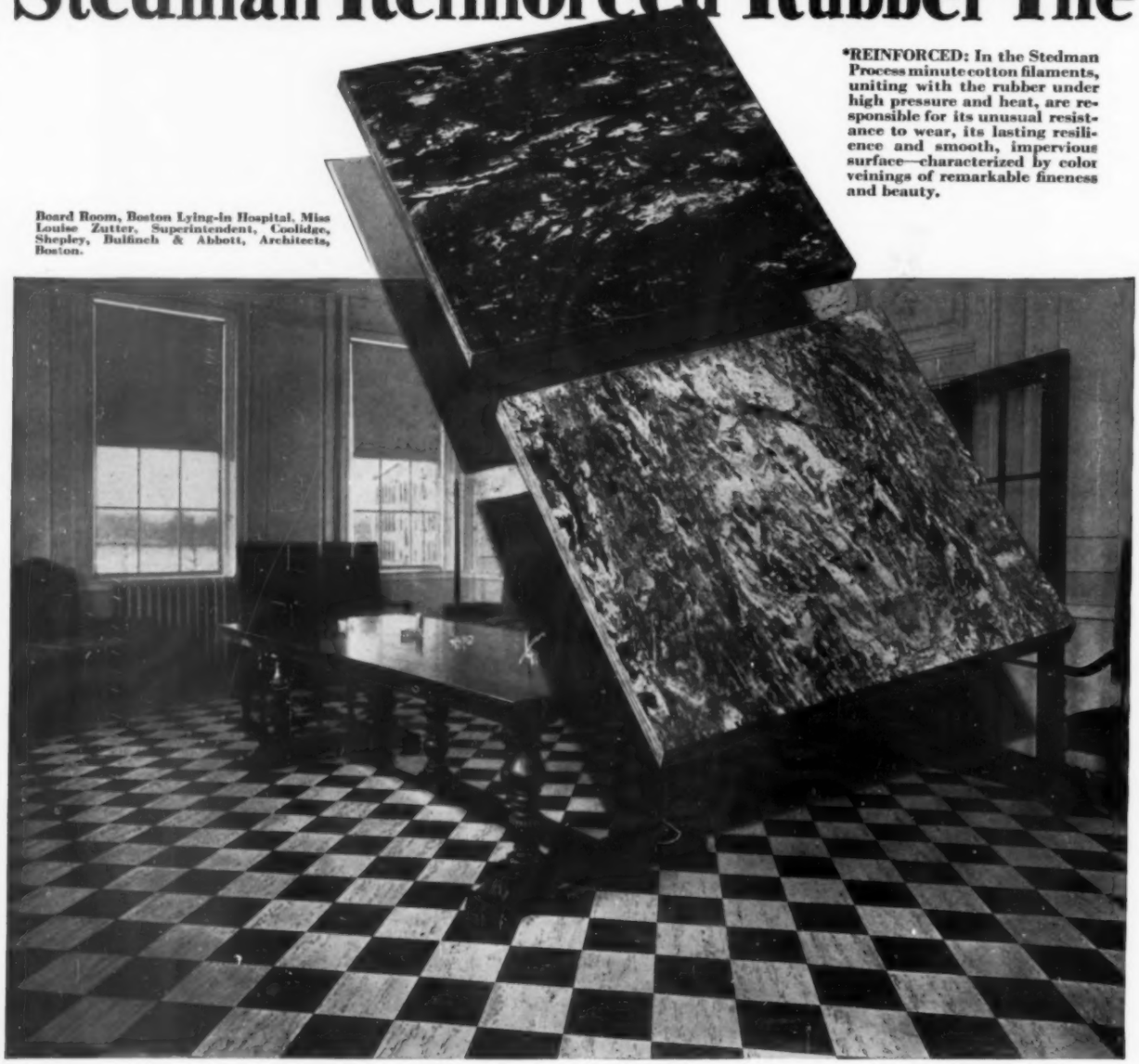
*REINFORCED: In the Stedman Process minute cotton filaments, uniting with the rubber under high pressure and heat, are responsible for its unusual resistance to wear, its lasting resilience and smooth, impervious surface—characterized by color veinings of remarkable fineness and beauty.

Board Room, Boston Lying-in Hospital. Miss Louise Zutter, Superintendent, Coolidge, Shepley, Bulfinch & Abbott, Architects, Boston.



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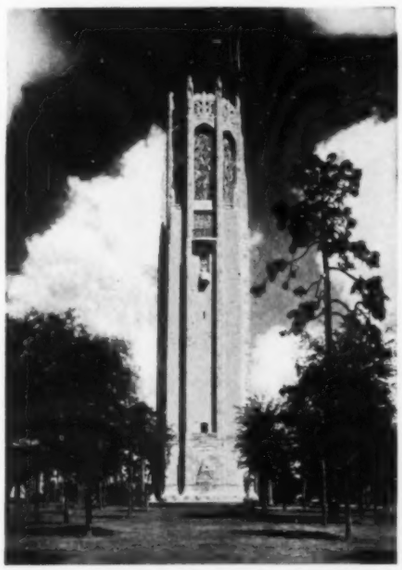

Bok Singing Tower, Mountain Lake, Florida, built largely of Etowah Pink Georgia Marble and some Creole Grey Georgia Marble. Milton B. Medary, Architect; Frederick Law Olmstead, Landscape Architect; Lee O. Laurie, Sculptor

INEXHAUSTIBLE SUPPLY
ADEQUATE PRODUCTION FACILITIES

THE supply of marble in the Georgia hills — White, Pink, Grey, and a variety of special colors — is adequate for countless generations. Eight quarries and three finishing plants in operation throughout the year ensure prompt deliveries on all contracts.

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The Georgia Marble subjects illustrated here are graphic three-dimensional testimonies to the beauty, soundness, and durability of this exceptional marble. When you select Georgia Marble, be it for a garden bench or a great building, your choice is backed up by experts whose search for a beautiful enduring material has also led *them* to Georgia Marble.

Federal Reserve Bank, Cleveland, Ohio, built of Pink Georgia Marble. The heroic statues are also Pink Georgia Marble, but a lighter shade of pink than the marble used for the building. Walker and Weeks, Architects.

Lincoln Statue, carved from 28 blocks of White Georgia Marble, Lincoln Memorial, Wash., D.C. Henry Bacon, Architect; Daniel Chester French, Sculptor; Piccirilli Brothers, Carvers and Erectors.

W. A. Clark Jr. Mausoleum, Hollywood Cemetery, California, built of White Georgia Marble, each pediment was carved from a solid block of marble over 25 feet long. Robert D. Farquhar, Architect.

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Burnham Boiler's long fire travel counts more than ever. Its long fire travel makes its short coal bill.

P.S.–

This same long fire travel is an additional insurance of economy, when oil is the fuel. It also has a way of muffling down combustion noises.

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There's a booklet called Letters To and Fro that tells of eight people's successful solution of eight separate home heating problems. Send for it.

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Crane's Bond is a 100% new white rag paper. Crisp, important, authoritative, it unmistakably reflects standing, prestige, dignity . . . Naturally, Crane's costs a bit more than the usual letterhead — but not nearly so much as you may have expected.

Even as a boy Heber Jedediah Grant was distinguished—for his penmanship and his baseball. He looks the part of a Saint: he is tall, deep-voiced, with copious whiskers and a Duke of Wellington nose. In spite of his multitudinous business activities, he insists that his total wealth today does not exceed $50,000.

Rich Hindu

The people of India are not renowned as industrialists, but there are exceptions. For example, the Tatas, father and son. About fifty years ago old Jamsetji Tata founded the Empress cotton mills at Nagpur. In ten years his mills had become the biggest in India. As soon as the Empress Mills were running smoothly, he and his son, Dorabji, proceeded to build some apartment houses, an hotel, a huge Institute of Science at Bangalore, and the Tata Iron & Steel Works. Before the steel works were completed, old Jamsetji died. His son finished the job in 1911, and within three years the works were paying dividends to 8,000 native stockholders. During the war the Tata works supplied to the British government some 300,000 tons of rails, shell steel and structural iron for the campaigns in Mesopotamia, Salonica, Egypt and East Africa. Tata dams and reservoirs on the Ghauts now supply light and power to most of Bombay. For his labors, Dorabji Tata has been knighted. Several years ago he bought the third largest diamond in the world, the celebrated Jubilee Diamond, from a syndicate of jewelers.

Not only are the Tatas entrepreneurs and patriots, they are also philanthropists. To make Nagpur a model industrial city, they enlisted the aid of John L. Mott, young and able son of the man who put the Y.M.C.A. around the world. The Junior Mott now lives in India, making his life work the improvement of conditions under which the natives work.

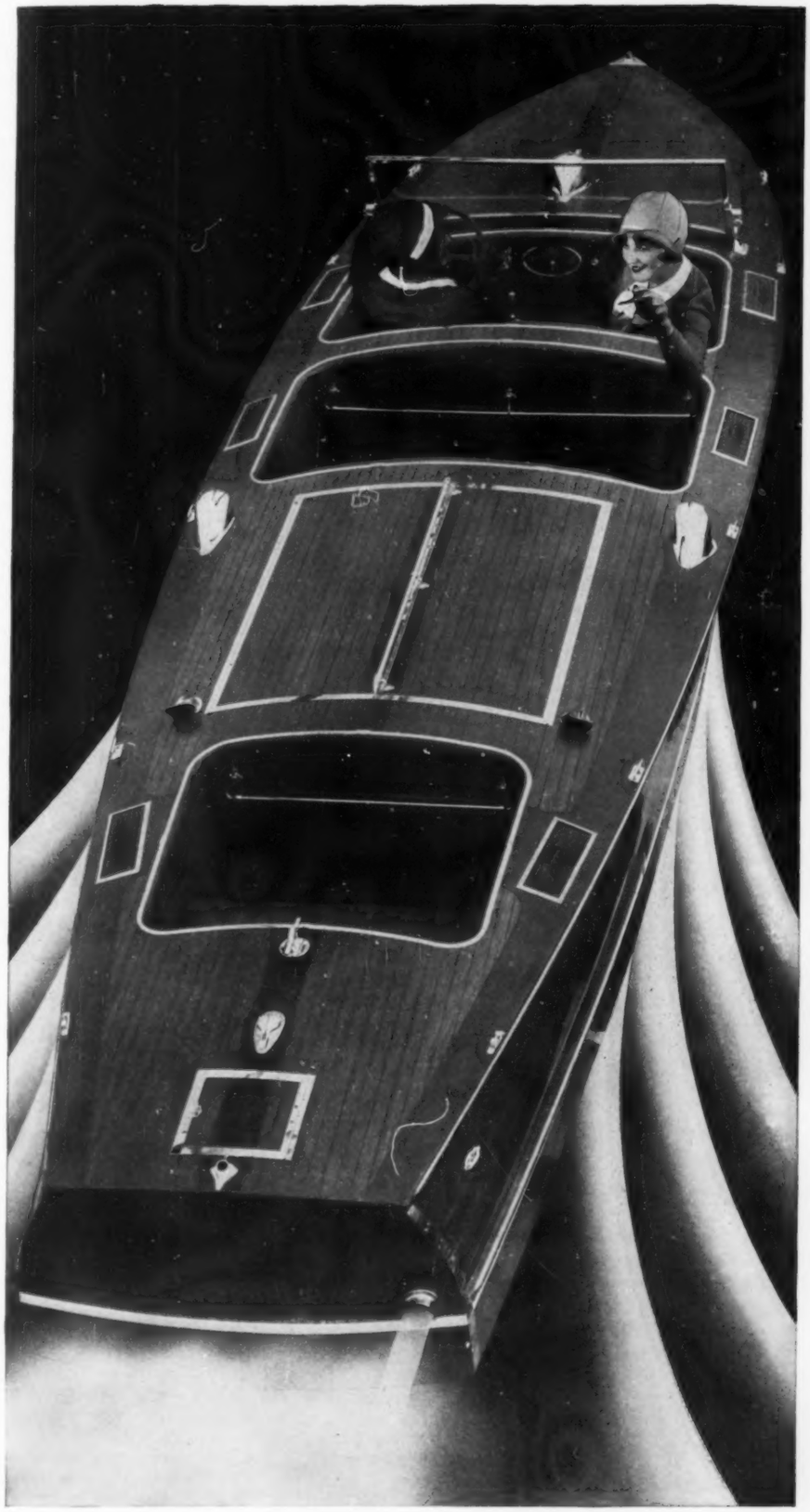
Bell of Bell-Cow

When John D. Rockefeller, Jr., goes to California he likes to stay at Glenwood Mission Inn in Riverside. The master of Glenwood Mission Inn is Mr. Frank A. Miller, known in many a state as a hotel man, but more widely known as a collector of bells and possessor of the largest collection in the world.

His first bell, a small Italian one, was given to him as a 1905 Christmas present from his daughter. He now owns a series of bells from Herod's palace and the bell of the bell-cow of Pope Paul III (1534-49). He also owns a Lili bell, made of a hollowed tree trunk, and used by Fiji Islanders as a signal which can carry as far as 100 miles. Mr. Miller's Lili bell was given him by Charles Kellogg, vibration expert of the Orpheum Circuit. One of Mr. Kellogg's favorite diversions is to find the vibration key of a gas flame and extinguish it by sounding a note on a pipe. The gas itself, however, he prudently turns off by hand.

Junk

Most junkmen aspire no higher than old bottles, rusty pots and pans, or, at the most, automobile parts. Not so Herman Sonken, of Kansas City, whose voracious, capacious appetite has obliterated whole factories, railroads, townships. The late Jacob Volk, eminent Manhattan house-wrecker, may have called himself "the most destructive force in Wall Street," but such flippancies are not for Herman Sonken. Three years ago he became a railroad president. When his company, the Sonken-Galamba Corp., bought a failing electric railway system, commuters asked Mr. Sonken to run it himself. Intrigued, he did so—and made money on it. He intends to supply fuel oil to Kansas City industries through an underground refrigerating pipe system which he recently bought for junk. His first venture in junk—breaking up wagons and buggies for their metal—he always calls "a reclamation project". From wagons he extended his reclaiming activities to automobiles, and then to railroads and factories. He has bought and junked for metal twenty-seven railroad systems, the largest being the 79-mile Cincinnati, Bedford & Chicago. He has "reclaimed" a village of 396 acres (Nidco, Mo.) and a complete powder mill (the du Pont mill at Holmes Park, Mo.). Twenty-five acres dotted with sheds and warehouses are necessary to handle the 5,000 carloads of scrap metal salvaged yearly by his company. Last year Herman Sonken achieved his masterpiece of reclamation: he purchased all the antiquated cells and doors of the federal penitentiary at Leavenworth, sent them east to be made into steel work for churches and schools.



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How superfluous to say anything more about Gar Wood runabouts.

Yet, you may be interested in knowing, as a shrewd investor, that these stock runabouts that Gar Wood builds are put together of the same identical materials and with the same care and skill as are the Gar Wood custom boats.

One man pays $35,000 for a boat, another $10,000. One has a special design, the other a stock model. Yet each is as fine a craft as the finest materials and the best skill can produce.

And if you have seen the new 1930 models at the Motor Boat Show, you know how graceful, how modern, how versatile they are. If not, permit us to send you the detailed information on the softest-riding speed boat ever built.

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MODERN LOWESTOFT is the result of the discovery of a secret formula last used by the Copeland Spode factory in 1805—a most important discovery, for now at last has modern ingenuity succeeded in producing a new Lowestoft worthy of its new mission—to carry down to posterity the sentiment of family pride in the exquisite things that belong to this day and age, "when today is a hundred years ago."
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Statistics

Billions

FIFTY years ago a man made his hundred thousand. A generation ago he made his million. Now a few of them have made, or are about to make, or are generally said to be about to make, their billion. A billion has become a possible fortune. The stock of General Motors swung through a maximum loss in value in 1929 of two and a half billions. Stocks on the New York Stock Exchange lost twenty-six billions of value in the fall of 1929. United States Income taxes exceed two billions. Total resources of United States banks exceed seventy-three billions. The United States produces about a billion barrels of oil per year (allowing a hundred billion cubic feet of natural gas to waste) and over a hundred billion standard-size cigarettes. United States Post Offices handle yearly seventeen billion pieces of first class mail. The United States produces ninety-two billion units of electricity in a year. There are approximately two billion human beings on the earth.

In other words we are surrounded by billions. And yet no man has ever identified a billion with his eyes. As for the population of the earth, the earth is, fortunately, round; as for the hundred billion cigarettes a year, a-billion-a-year is a kind of metaphysical Jabberwock a year long and a billion thick and no man has ever laid his living eyes on that. Even in hard cash a billion is invisible. There are not five billion cash dollars in the whole United States and a billionaire is a creature of faith like an angel for no billionaire could liquidate for a billion. The whole concept of a billion is a combination of mathematics and belief; it is obvious that a thousand times a thousand times a thousand is a billion: therefore a billion must exist. But the theologians were accustomed to prove the existence of somewhat different intangible entities by the same means. ("Ten thousand times ten thousand in shining raiment bright" are not a billion.)

The easiest way to conceive a billion seems to be to stretch it over time or space. Of a billion dollars left in the Age of Pericles to be paid out at the rate of a thousand dollars a day there would remain a hundred millions. The row of one billion gold dollars Mr. Ford has been laying down, end to end, from Bombay to Boston has just been suppressed at the Fenway after 9,233 rollicking miles. All of which comes down to saying that a billion is a long way and a very long time. As a mass it is equally impressive. A billion bricks would erect the sheathes of fifty-nine Woolworth Buildings. Fifty-nine Woolworth Buildings are, however, unnecessary.

The easiest thing to believe about a billion is that a billion people lacking a few millions ride on the New York subways every year.

Perhaps the most effective way of realizing the dimensions of a billion dollars is to make it.

Penny

"I heard a wise man say Give crowns and pounds and guineas But not your heart away . . ." Young men, however, are apt to be careless of their hearts, mindful of their pounds and guineas, but rarely, very rarely, mindful of their pennies. A penny, they know, will tell them their weight, will purchase exactly one stick of chewing gum. Some may even know that a penny will light a 40-watt bulb—for three and a half hours. But pennies are generally a nuisance. You get them when you buy a newspaper. You can never tip with them.

But this a penny can do, so scorn it less: one penny can move a ton of coal one mile, almost, by rail. By sea one penny can move a ton of coal fifteen miles, which, incidentally, is 79,200 feet.

What a child may know

Great Britain, with over 20,000,000 tons of steamers (of over 1,000 gross tons each), has more transoceanic shipping facilities than the next five nations combined—the United States, 3,900,000 tons; Japan, 3,700,000 tons; Germany, 3,284,000 tons; Italy, 3,195,000 tons; France, 3,021,000 tons. There are 51,223,000 square miles of land on the earth of which the continental U. S. forms less than six per cent. Of people, the U. S. also has about six per cent.

Under the ground in the U. S. is enough coal to give every person in the U. S. 23,000 tons although the average consumption is only six tons a year. Liberal estimates of the oil reserve place it at one per cent that

[*Continued on page 38*]

THE WORLD IS HELD TOGETHER WITH BOLTS, NUTS AND RIVETS

This is the age of building! Of great cities with their towering buildings, growing from thousands to millions in a few decades! Of vast industrial communities of factories and dwellings springing up almost overnight!

And binding this vast fabric together, woven into its very vitals, are millions on millions of bolts, nuts and rivets.

For eighty-five years the firm of Russell, Burdsall & Ward have been supplying these essential bits of metal that industry, the material sub-structure of our civilization, might go on.

The ideals on which this business was founded in 1845, the conviction that high quality, prompt service and absolute square dealing were the sum total of business, have had their justification in the fact that so large a proportion of the world's consumption of bolts, nuts and rivets are branded EMPIRE.

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FORTUNE's purpose is to reflect Industrial Life in ink and paper and word and picture as the finest skyscraper reflects it in stone and steel and architecture.

Business takes FORTUNE to the tip of the wing of the airplane and through the depths of the ocean along be-barnacled cables. It forces FORTUNE to peer into dazzling furnaces and into the faces of bankers. FORTUNE must follow the chemist to the brink of worlds newer than Columbus found and it must jog with freight cars across Nevada's desert. FORTUNE is involved in the fashions of flappers and in glass made from sand. It is packed in millions of cans and saluted by Boards of Directors on the pinnacles of skyscrapers. Mountains diminish, rivers change their course and thirty million people assemble nightly at the cinema.

Into all these matters FORTUNE will inquire with unbridled curiosity. And, above all, FORTUNE will make its discoveries clear, coherent, vivid, so that the reading of it may be one of the keenest pleasures in the life of every subscriber.

And, if your reading of FORTUNE's current discoveries as reported in this first number has given you keen pleasure you may, we assure you, look forward with anticipations of even greater pleasure in the second and the third and the following issues.

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of coal, or a few hundred barrels for each person. Of this supply we use about eight barrels a year.

Fifteen years ago 70 per cent of the toys bought in this country came from Germany. Now 90 per cent are made in the United States.

What few children know

At the San Francisco waterfront 16 men can unload a cargo of copra in one fourth the time it took from 200 to 300 men to load it in the Philippines. Machinery at San Francisco accounts for the difference.

From the fishermen of British Columbia and New Brunswick American business men in 1927 bought 2,820 cwt. of herring scales. Their use: the manufacture of artificial pearls. Recently herring scales have been in less demand, pearl makers using synthetic pearl essence which is chemically the same as calomel.

In the United States 45,500,000 men are employed, but electricity and machines bring the total annual manpower to over 600,000,000 men. A conservative estimate of the energy output in terms of manpower is:

Electric power	337,880,000
Railroads	127,000,000
Agriculture	73,070,000
Manufacturers	70,000,000
Mines and quarries	17,600,000
Automobiles	12,200,000
	637,750,000

A motor car selling for $3,000 represents about $200 worth of direct labor factory costs. $1,200—or 40 per cent—is accounted for by expense of distribution.

Without machinery, 1,000,000 men could build 10,000 Fords at a cost of $10,000 for each car which, of course, is only a figure of speech.

A wire so fine that it would stretch twice around the world could be drawn from one cubic inch of platinum.

A round lake five miles in diameter and four feet deep would contain 14,000,000,000 gallons—a quantity just about equal to the amount of gasoline consumed in the United States last year.

In the Wall Street district alone 850 miles of ticker-tape are used daily.

SWC
A NATIONAL ORGANIZATION FOR CONSTRUCTIVE SERVICE

Budgetary Control

An address on this subject delivered at the annual meeting of the Babson Statistical Organization is now available in booklet form and will be sent to interested executives.

Scovell Wellington and Company

ACCOUNTANTS • ENGINEERS

10 EAST 40TH STREET, NEW YORK CITY

BOSTON SPRINGFIELD CLEVELAND SYRACUSE CHICAGO KANSAS CITY PHILADELPHIA SAN FRANCISCO

Vertex FILE POCKETS

are firm, durable, expansible filing containers that can be used in any vertical filing system. . .

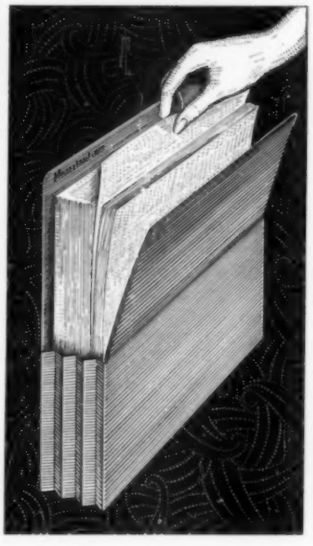
They never slump down in the file drawer, but stand erect with the index tab always in plain view; hold three or three hundred letters with equal facility, are easy to remove or replace in the file, hold small papers as well as large with never a chance that they will become lost or misfiled; save time in daily filing and finding papers; improve instantly the efficiency and appearance of the drawer. .

Ordinary flat folders lack all of these advantages. They were never intended to contain many papers or for continued use. Your own files will show the need of something better for your heavier correspondence. . . . . .

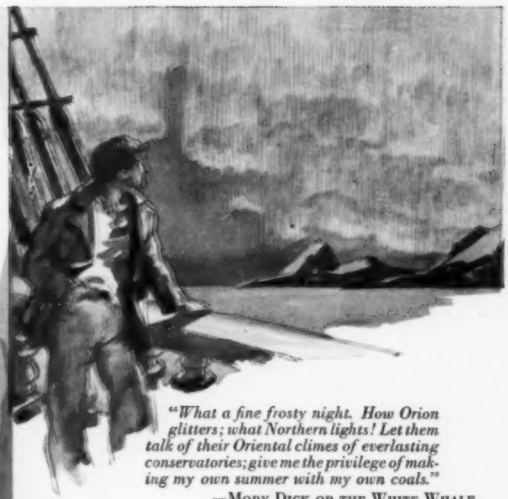
You will know what real filing satisfaction is the minute you install "Vertex" File Pockets to replace the bulkiest of your present folders. . . . . .

A free sample file pocket will be sent you for trial if you will address us on your business letterhead, mentioning "Fortune" and stating whether letter size or legal size is desired.

Alvah Bushnell Company
Dept. F, 13th & Wood Sts., Philadelphia, Pa.



The Capitol Red Cap
Embodies every improvement known in round boilers. A thick blanket of rock wool, the finest insulation obtainable, suggests its quality in every particular. For medium sized residences.



"What a fine frosty night. How Orion glitters; what Northern lights! Let them talk of their Oriental climes of everlasting conservatories; give me the privilege of making my own summer with my own coals."
—MOBY DICK OR THE WHITE WHALE

. . . making my own summer with my own coals . . .

TO homes along the cold New England coast, under icily glittering Wisconsin stars, on wind-swept prairies, these three new *Capitol Red* heat-makers are now bringing the privilege of making their own summer. Not only the privilege but the certainty. For their heating capacity is guaranteed in writing, under *Capitol Guaranteed Heating.*

Immediately they were placed on the market a year ago, these better boilers, so fully warranted, brought a rush of buyers that have kept United States Radiator factories working overtime to equip and modernize homes in every part of America.

Through the long winter evenings, why should not your home have the delightful sense of safety in the face of the elements, the sure and cheery warmth, the glowing beauty brought by these jacketed, insulated, handsome boilers for coal, coke, oil, or gas. Write for the valuable manual of better heating, "A Modern House Warming," and names of dependable heating contractors to make your installation.

United States Radiator Corporation
DETROIT, MICHIGAN
8 Factories and 35 Assembling Plants Serve the Country
For 40 years builders of dependable heating equipment

THE PACIFIC STEEL BOILER CORPORATION
Division of the United States Radiator Corporation, builds welded steel heating boilers for large installations — business buildings, factories, schools, hotels, and large apartments

© 1930, U. S. R. Corp.

The Capitol Red Top
This is, we believe, the finest square boiler yet achieved. Rock wool insulation. Staunch jacket in baked enamel. Vitreous enamel doors. For medium sized and large residences.

The Capitol Red Head
To cottages and bungalows this handsome heat-maker, with rock wool insulation, brings the advantages of radiator heat for little if any more than the cost of your second choice in heating equipment.

Guaranteed Heating WITH
Capitol Boilers
AND RADIATORS

A LOCKHEED FOR COLONEL LINDBERGH

Last summer Colonel Lindbergh laid before Lockheed engineers specifications for the type of airplane which would meet his ideas and requirements. It should incorporate the latest development in aircraft engineering and design. It should be powered with a proven type of engine and, therefore, obtain efficiency through aerodynamic design rather than additional power. It should have a maximum top speed, together with large carrying capacity, and a landing speed which would permit the use of undeveloped airports far from organized airways.

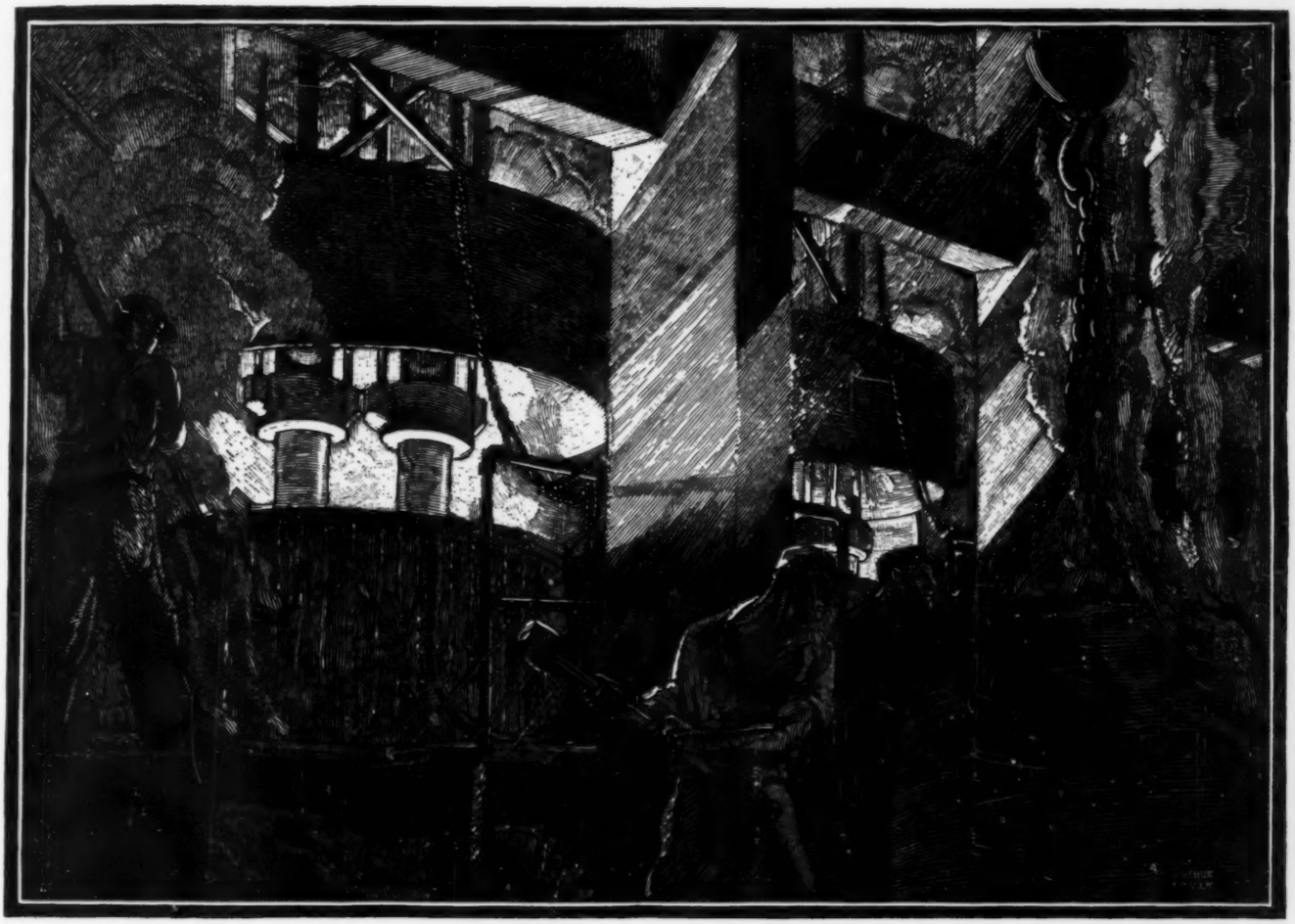
Colonel Lindbergh recommended a low-winged monoplane with two open cockpits—and the Wasp-powered Sirius is Lockheed's answer.

According to the agreement between Colonel Lindbergh and the Lockheed Corporation, the plane was not to be paid for until its performance was satisfactory. In California last month Colonel Lindbergh took delivery of the first Lockheed Sirius and expressed his approval of the design. As a result of the performance tests of Colonel Lindbergh's plane, the Sirius has been made a standard model in the famous Lockheed line.

DETROIT AIRCRAFT

UNION TRUST BUILDING, DETROIT

Lockheed Aircraft Corporation
Ryan Aircraft Corporation
Parks Air College, Incorporated
Parks Aircraft Corporation
Eastman Aircraft Corporation
Blackburn Aircraft Corporation
Marine Aircraft Corporation
Grosse Ile Airport, Incorporated
Gliders, Incorporated
Aircraft Development Corporation
Aircraft Parts Company, Incorporated



DAY and night, a veritable inferno of electric heat burns on. The clay-like mineral bauxite—transformed by fire—becomes the potent Norton abrasive trade-marked "Alundum," serving the world in grinding wheels, refractory ware, porous plates, non-slip floor materials.

NORTON COMPANY, WORCESTER, MASS.

NORTON

Grinding Wheels
Refractories
Porous Plates
Floor and Stair Tile
Pulpstones
Grinding and Lapping Machines

The New York Trust Company

Capital, Surplus and Undivided Profits $45,000,000

TRUSTEES

H. M. Addinsell	Harris, Forbes & Company
Frederic W. Allen	Lee, Higginson & Company
Mortimer N. Buckner	Chairman of the Board
James C. Colgate	James B. Colgate & Company
Alfred A. Cook	Cook, Nathan & Lehman
Arthur J. Cumnock	Catlin & Company, Inc.
William F. Cutler	American Brake Shoe & Fdy. Co.
Harry P. Davison	J. P. Morgan & Company
Robert W. De Forest	De Forest Brothers
George Doubleday	Ingersoll-Rand Company
Russell H. Dunham	Hercules Powder Company
Samuel H. Fisher	New York
John A. Garver	Shearman & Sterling
Artemus L. Gates	President
Harvey D. Gibson	Chairman Executive Committee
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F. N. Hoffstot	Pressed Steel Car Company
Walter Jennings	New York
Darwin P. Kingsley	New York Life Insurance Co.
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Robert A. Lovett	Brown Brothers & Company
Howard W. Maxwell	Atlas Portland Cement Company
Edward S. Moore	New York
Grayson M.-P. Murphy	G. M.-P. Murphy & Company
Harry T. Peters	New York
Dean Sage	Zabriskie, Sage, Gray & Todd
Louis Stewart, Sr.	New York
Vanderbilt Webb	Murray, Aldrich & Webb
Frederick S. Wheeler	American Can Company

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100 BROADWAY

40TH STREET AND MADISON AVENUE

57TH STREET AND FIFTH AVENUE

ENTIRE CONTENTS OF THIS ADVERTISEMENT COPYRIGHT 1930 BY THE WILLIAM F. WHOLEY CO., INC., NEW YORK

WHY do some men forge ahead faster than others? Look deep enough and you will be sure to discover the reason.

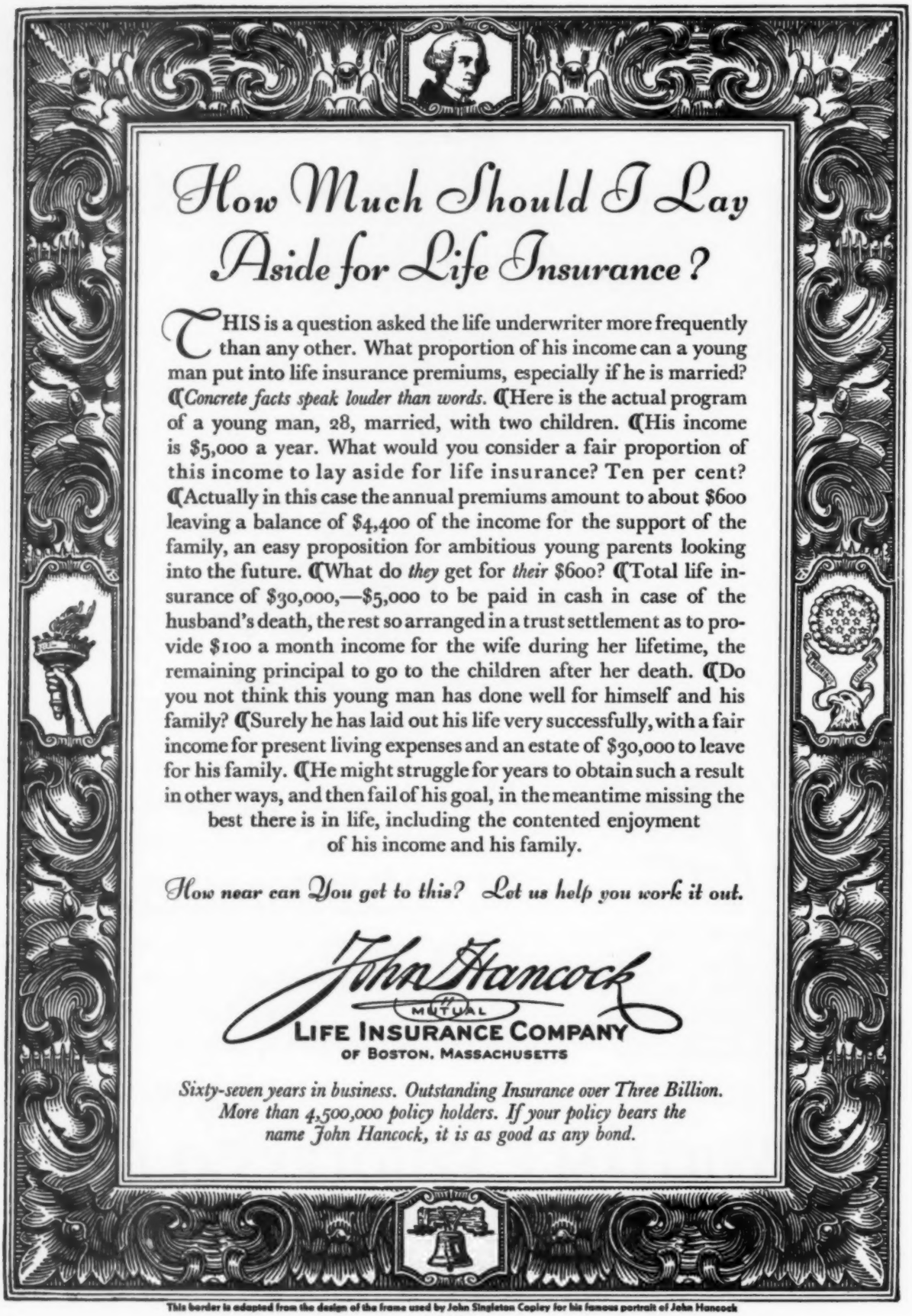
Successful men invariably know how to focus every influence that will make for their progress. They never overlook a single form of aid. That is why we are commissioned to design, decorate and furnish their offices!

The service of this company includes the expert planning of office space, interior architectural design, decoration, lighting and furnishing, together with the execution of every detail by a trained, unified organization of specialists. ℭ Recommendations and sketches will be furnished without obligation to interested business executives and professional men.

The WILLIAM F. WHOLEY CO. *Inc.*

11 East 36th Street • NEW YORK • CALedonia 9810

Equipment Specialists



How Much Should I Lay Aside for Life Insurance?

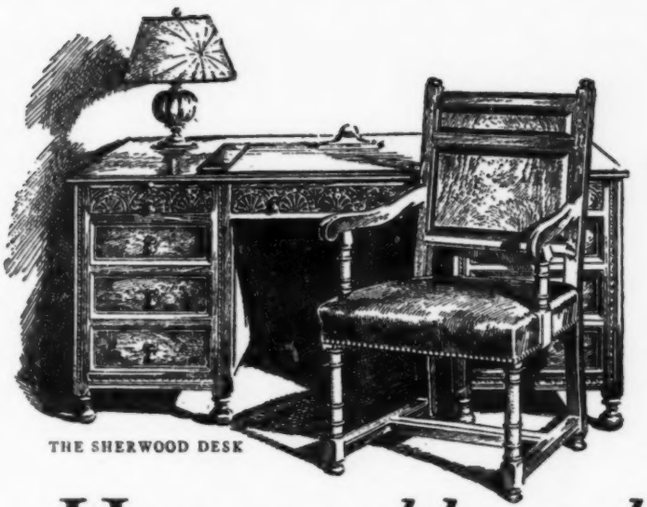
THIS is a question asked the life underwriter more frequently than any other. What proportion of his income can a young man put into life insurance premiums, especially if he is married? ¶*Concrete facts speak louder than words.* ¶Here is the actual program of a young man, 28, married, with two children. ¶His income is $5,000 a year. What would you consider a fair proportion of this income to lay aside for life insurance? Ten per cent? ¶Actually in this case the annual premiums amount to about $600 leaving a balance of $4,400 of the income for the support of the family, an easy proposition for ambitious young parents looking into the future. ¶What do *they* get for *their* $600? ¶Total life insurance of $30,000,—$5,000 to be paid in cash in case of the husband's death, the rest so arranged in a trust settlement as to provide $100 a month income for the wife during her lifetime, the remaining principal to go to the children after her death. ¶Do you not think this young man has done well for himself and his family? ¶Surely he has laid out his life very successfully, with a fair income for present living expenses and an estate of $30,000 to leave for his family. ¶He might struggle for years to obtain such a result in other ways, and then fail of his goal, in the meantime missing the best there is in life, including the contented enjoyment of his income and his family.

How near can You get to this? Let us help you work it out.

John Hancock
MUTUAL
LIFE INSURANCE COMPANY
OF BOSTON, MASSACHUSETTS

Sixty-seven years in business. Outstanding Insurance over Three Billion. More than 4,500,000 policy holders. If your policy bears the name John Hancock, it is as good as any bond.

This border is adapted from the design of the frame used by John Singleton Copley for his famous portrait of John Hancock



THE SHERWOOD DESK

How would you like to own an office that people will remember?

ON the twenty-eighth floor of the Graybar Building there looks out upon the bridge-spanned blue of the East River the office of a noted advertising executive—an office extraordinarily pleasant and comfortable.

The desk in this impressive room is rugged and uncompromising as the high spirited man who now and then grows impatient with slower moving minds and pounds his fist upon it. Three hundred years ago, in merry England, the chests that inspired this desk were made. Today—English oak from Sherwood, rich in pollard grain and burls, is joined by Danersk craftsmen with the precision of modern construction and the interest of the old time panels and carving.

Hanging on the walls is a trophy from the north woods, of personal significance; and beneath it a pair of English Windsors, ample in proportion and of rare form, from a famous collection.

Over in the corner a deep cushioned chair from old Quebec invites to quiet pondering of future plans after partners and employes have gone home.

But the pinnacle of the whole room, the swashbuckling piece which by itself creates the mellow atmosphere of a gentleman's study, is an open racked ship's cupboard in which are stacked editions of Kipling, Conrad, Eugene O'Neill. In just such a cupboard, old-time Salem mariners used to display the treasures collected on their adventurous voyages to the Orient.

These are a few of the interesting designs personally selected by this executive that form a small collection—rich in meaning, and yet at no greater cost than any well made furniture.

You would enjoy an office like this. You, too, can have the association of furniture interesting, vigorous and inspiring—Danersk furniture—faithful to the rich traditions of the past—carefully built by hand by Scotch and English craftsmen.

Send for our brochure, "The Livable Office."

THE QUEBEC CHAIR

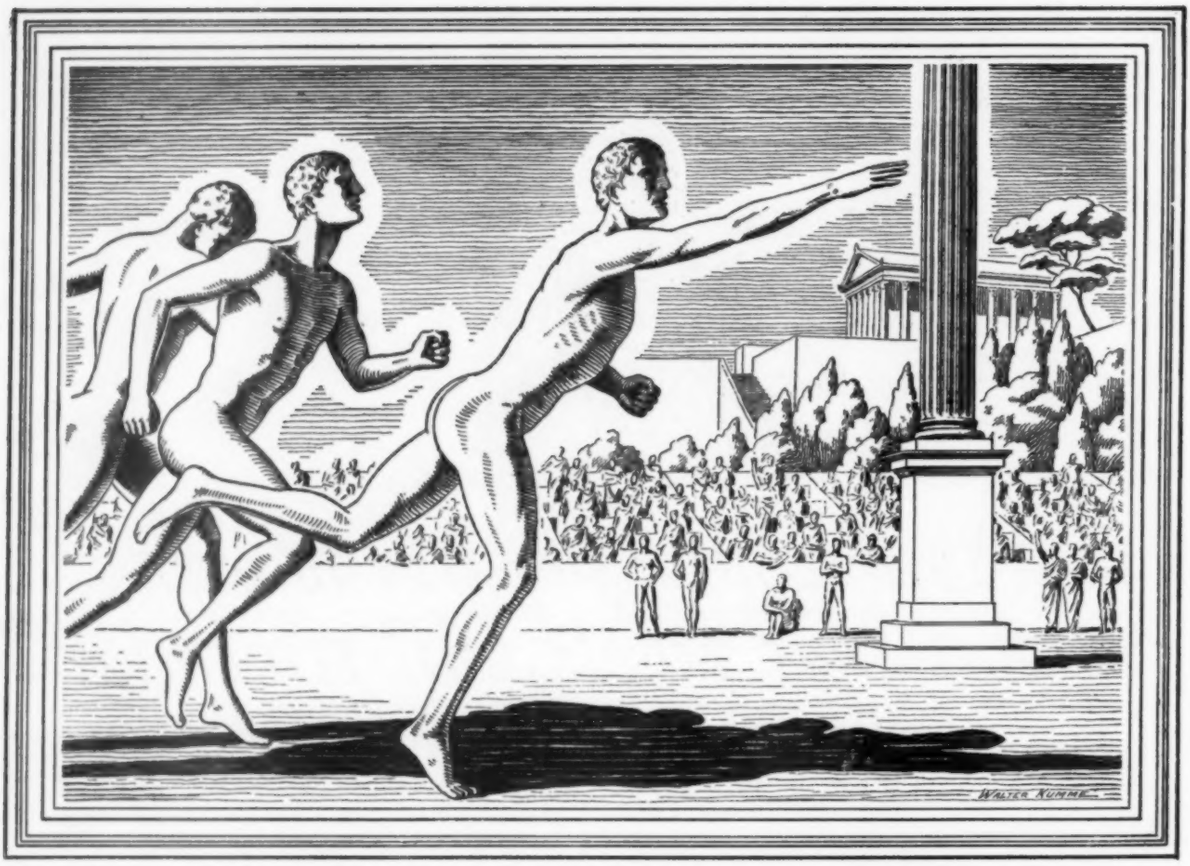
THE SHIP CUPBOARD

DANERSK FURNITURE

ERSKINE-DANFORTH CORPORATION—*Designers and makers of choice furniture*

NEW YORK: 383 MADISON AVENUE CLEVELAND: 11129 EUCLID AVENUE CHICAGO: 620 NORTH MICHIGAN AVENUE

DISTRIBUTORS—BOSTON: 132 NEWBURY STREET—LOS ANGELES: 2869 WEST SEVENTH STREET



KEEP YOUR BUSINESS IN THE RACE

SCIENTIFIC discoveries are coming so fast that it is difficult for the average business man to be sure that his materials and processes are up-to-date; to be sure that his competitor has not gained an advantage by finding some short cut.

Within your lifetime nitrocellulose lacquers and solutions have proved their value in innumerable ways; but as new uses are discovered almost daily, it is possible that you may find a use for them that will answer some of your perplexing problems.

Everyone is familiar with the lovely colors and beautiful finish that nitrocellulose lacquer imparts to automobiles, furniture, walls, woodwork, and hundreds of articles in daily use. It is not so well-known that this lacquer forms a tough, durable, protective film that is waterproof, and can easily be cleaned with soap and water. This protective film may be transparent and invisible as well as decorative.

Nitrocellulose lacquer is noted for its quick drying and ease of application by spray, brush, or dipping; but many do not realize that it can be applied to floor and wall coverings and other decorative materials.

As a coating for artificial leather, a finish for real leather, and as a stiffener for fabrics in box toes, it is widely used. Its possibilities for waterproofing fabrics without stiffening them, for giving a silk-like sheen to dull materials, and as an adhesive, are not so generally understood.

For those who are unfamiliar with nitrocellulose lacquers, as well as those who are now using them, but who may profitably put them to new uses, we have prepared a booklet called, "The Story of Modern Lacquers." It is not technical, but it will tell you many interesting things about lacquers that it may be profitable for you to know. A request for it on your business stationery will bring it to you promptly.

Nitrocellulose lacquers are sold by the paint, varnish and lacquer trade. Our research department will gladly assist in developing lacquers and solutions for new uses or to suit your special requirements.

When informing us of your problems, please name the supplier of finishing materials with whom you prefer to have us work. It will involve no obligation to consult us.

HERCULES POWDER COMPANY

(INCORPORATED)

ROOM 17, CELLULOSE PRODUCTS DEPARTMENT

WILMINGTON, DELAWARE

Ten Common Weaknesses

IN MERCHANDISING, ADVERTISING AND SELLING

That Diminish Profits

MR. FRED. W. SHIBLEY, Vice-President of Bankers Trust Company, author of "The New Way to Net Profits", recently asked us to summarize the major reasons for unsatisfactory sales volume and earnings.

After reviewing typical situations, not only in companies which we have studied in detail, but also in others which we have observed with more than ordinary care, we submitted this list of common weaknesses:

1—INADEQUATE merchandising: neglect of the tasks necessary to incorporate inherent salability in the product.

2—SUPERFICIAL merchandising: handling these problems in an ordinary and obvious manner—due to the use of partial facts or to hasty action.

3—ERRATIC merchandising: deviations from sound practice that interfere with continuity of sales effort, such as faulty timing or the impulsive use of untried intuitive ideas.

4—UNSOUND advertising policies: visionary attempts to do a job that cannot be done within the limits of time and cost.

5—DIFFUSE advertising plans: scattering effort in different directions; failure to achieve tangible results.

6—UNINTERESTING advertisements: either the lack of substance having a personal appeal to the chosen audience, or a dull, lifeless, vague presentation.

7—INSINCERE advertising claims: not only the use of misleading statements or half-truths, but also the failure to be as candid as when talking with friends.

8—UNBALANCED sales policy: the result of not seeing the job as a whole and relating basic factors into a unified program.

9—UNECONOMIC sales plans: schemes used without adjusting the means to the end, in advance or during the operation.

10—INEFFECTIVE management: the absence of wise, human leadership that harmonizes personalities, plans and budgets.

To illustrate each of the ten points, two or three examples were cited,—a total of 27. Some described post-mortem situations; others outlined imminent failures that were later rebuilt into notable successes: still others brought out the positive side, showing how mistakes had been foreseen and avoided. A photostat copy of the report to Mr. Shibley (names deleted) is available to interested executives.

THE EXPERIENCE and ability behind that report are the result of the original policy of our organization, conceived six years ago, which has been worked out with success: The idea of providing a thoroughly *unbiased*, finely *balanced* service in creative advertising that carries its full share of the load of the sales dollar.

While we perform all the functions of an advertising agency, we operate on a new basis which divorces our fee (profit) from variations in the size or allocation of the client's advertising appropriation.

This policy causes us to give as much attention to merchandising as to advertising; in some cases, more. It leads us to take an active interest in the selling problem when the client so desires. It directs our thought to sales forecasting and budgetary control when required.

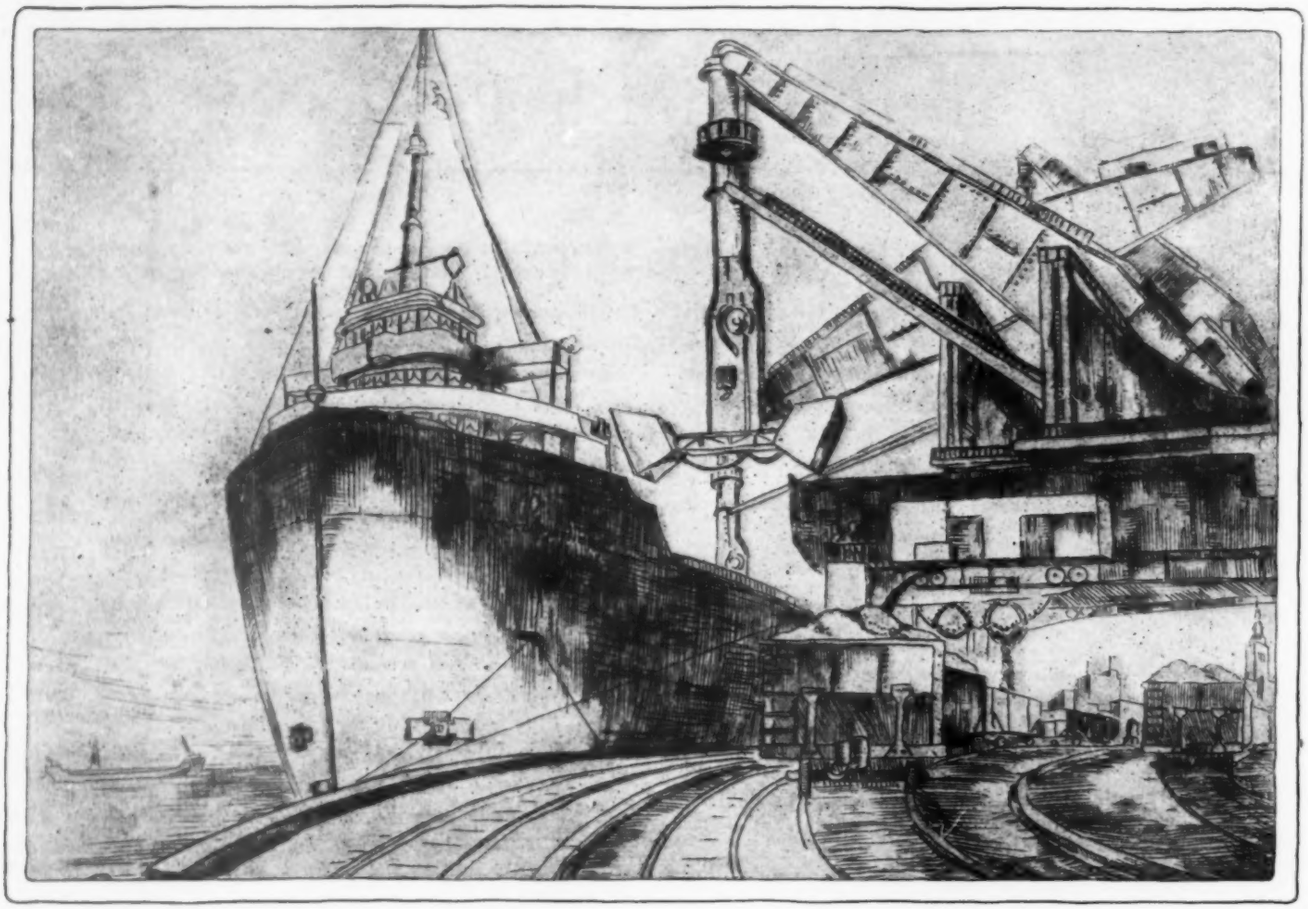
Our organization therefore has identically the same viewpoint as the client,— a sustained interest in the expansion of his volume and his profits on a permanent basis.

COWAN & DENGLER

ADVERTISING • MERCHANDISING • SALES COUNSEL

NEW YORK

IF YOU WANT ABUNDANT RAW MATERIALS



CLEVELAND offers manufacturers substantial savings in the cost of raw and processed materials, enabling them to sell their finished products on a more favorable basis than competitors elsewhere. Closeness to original sources of supply reduces both freight cost and the time factor to an absolute minimum.

¶ Mountains of ore are constantly being fused into metal —and as constantly replenished by the great ore fleet which, in 1928, brought thirty million tons of iron ore down the lakes to the Cleveland district. Mills and fabricators of metal sold a 1928 output of $256,000,000.

¶ Whether you use basic raw materials—coal, ore, stone, sand, sulphur, oils, wool, rubber, wood and grain; or semi-finished products such as chemicals, paints, varnishes, castings, stampings, steel shapes, food stuffs and piece goods; or finished units like bolts and nuts, axles, motors, blowers, regulators, lubricators and valves— prompt low-cost delivery may be had from immediate business neighbors.

¶ Proximity to raw material is one of ten main factors in selecting a strategic location for a business. ¶ For specific data regarding any or all these factors, write this Bank.

GUARDIAN TRUST COMPANY • CLEVELAND, OHIO

RESOURCES MORE THAN $165,000,000

CHARLES ROSWELL ERWIN

THE PILOT

In this new era of business with Titans come to grips, there is a name that is frequently heard in great counting-rooms and around directors' tables. When millions are being levied for the supremacy of an industry, this name is mentioned with respect. It has been closely identified with the success of fourteen of the largest businesses of their respective kinds in the world. It has helped to rear many another colossus from pygmy ranks and it has aided in wresting powerful crowns from lofty brows.

HE had decided to retire before he took the helm of his new ship.

Those clear grey eyes had seen Chicago burn. They had known Yerkes, "Old Hutch," Harriman and Marshall Field.

Dean of his profession, he had for years been president of the greatest advertising agency of his day.

He had weathered the long voyage, brought his vessel safely into port, and looked now to some peace in the twilight of his years.

But an ambitious brown-eyed boy, only a brief time out of college, prevailed on him to take the wheel again.

And so Erwin, Wasey & Company was launched.

GREY eyes looked into brown eyes as the Pilot said he would join in a new advertising business if that business would cater to an old man's whim.

For out of the wisdom of his years he foresaw a new order of things on the business horizon.

He saw advertising as a fine profession with ideals as stern as those of medicine and law.

And the first ideal was service to the client.

A simple man, he defined that now abused word "service" not in cleverness but in terms of solemn responsibility.

The aim of his new enterprise would be not merely to buy and fill publication space for an advertiser, but to bring that advertiser profit.

For the first time advertising plans were to be based on fact, not guesswork.

And thousands of dollars of the new agency's own funds frequently were expended in research to determine a right advertising course, before risking one dollar of the advertiser's money.

A NEW practice, then; a seeming commercial philanthropy; wiseacres predicted reefs, but the Erwin, Wasey ship sailed on.

Writers such as had never been known to the advertising profession now brought a new standard to the literature of business.

Men who could have made their fame in journalism or the novel wrote advertisements that opened purse-strings that would not yield before.

Artists and illustrators left their studios in the East and West and came to Chicago to illuminate this new advertising that was the talk of the day.

Jaded typographers smiled with hope renewed and lent new beauty to the advertising page.

So outstanding was this new school of advertising that it became a matter of national comment.

And the growth of Erwin, Wasey & Company during the first five years of its history is still a matter of wonder among oldsters of the profession.

AFTER the war the Pilot set his course for Europe. In eleven countries, Erwin, Wasey ideals have since established the greatest American advertising agency business overseas.

New York came next, where the same principles made the same astounding record that had been accomplished in Chicago.

A record distinguished not alone by the growth of the agency but even more conspicuously by the growth of the advertisers it serves.

THE Pilot has left for the Long Holiday, but the ship sails on, manned by a crew who joined with him on her maiden voyage.

It is a good crew, with great faith in the simple magic of clear thinking and hard work, *and it has trebled the business left in its care in the last four years.*

Now it brings Erwin, Wasey & Company to the Pacific Coast, where, in Los Angeles, San Francisco and Seattle it purposes to point advertisers for leadership as it has in Chicago, New York and Europe.

It prints this announcement in veneration of the man who held to the principle that in advertising, as in life, the great thing is knowing *where you are going, and how to get there!*

ERWIN, WASEY & COMPANY

Advertising

NEW YORK · CHICAGO · LONDON · SAN FRANCISCO · LOS ANGELES · BERLIN · SEATTLE · PARIS · STOCKHOLM · MILAN · BRUSSELS · COPENHAGEN · ROTTERDAM · ZURICH · HELSINGFORS · BARCELONA

CAUSE

However long the life of any one man, it can be at best but a brief parenthesis in the life of an enduring business.

Goodyear has chosen therefore to found its institutional destiny not upon individual brilliance, but upon principles which succeeding Goodyear generations may uninterruptedly serve.

Foremost of such principles are these: that place is the reward of merit, whether for man or product; and that serviceability to the common good is the true test of policy.

Sustaining every Goodyear principle, and Goodyear leadership as well, is the devotion of a skilled and unified personnel to products of a quality that protect our good name.

F. W. Litchfield

President

GOOD

RESULT

The singular uniformity of quality which distinguishes Goodyear Tires throughout the world is a direct effect of the endeavor of all Goodyear men to make common cause. Thus the Goodyear Tire you buy here or abroad—whether made in Goodyear factories in Akron, Los Angeles, Alabama, Canada, England or Australia—is like every other Goodyear Tire; and embodies invariably that excellence which for fourteen *years has made* "more people ride on Goodyear Tires than on any other kind."

GOODYEAR

Copyright 1930, by the Goodyear Tire & Rubber Co., Inc.

LUXURIOUS TRANSPORTATION

THE Packard Custom Eight—with its new and enriched fittings and upholstery, its greater refinement of detail—today offers luxury far beyond that of any famous Packard of the past. Save for the Packard Eight De Luxe, it is truly the world's finest motor car—in brilliance of performance as well as in beauty and distinction of appearance.

The Custom Eight is built on a chassis of 140½-inch wheelbase. Its powerplant—identical with that of the Packard Eight De Luxe—includes a new four-speed transmission and further refinement of the famous Packard straight-eight motor. It provides new smoothness, new speed, new agility, in traffic or on the open road.

Packard luxury—brought to even greater heights in today's Packard Eights—is winning admiration and patronage as never before. Record-breaking deliveries preceded the introduction of the present Packard Eights. Since then sales have mounted to new high levels—with the beautiful and practical Five-Passenger Coupe, pictured below on the Custom Eight chassis, among the most popular models.

Those who desire and can afford the utmost in motoring luxury—and their number is constantly increasing—are now, as always, turning to Packard cars.

The galleys of the Barbary Corsairs—those ruthless privateers who raided the coasts and commerce of the Mediterranean in the 16th century—were magnificently equipped in the height of barbaric luxury

PACKARD

ASK THE MAN WHO OWNS ONE

Volume I

Fortune

Number I

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Photographs by Margaret Bourke-White

for March

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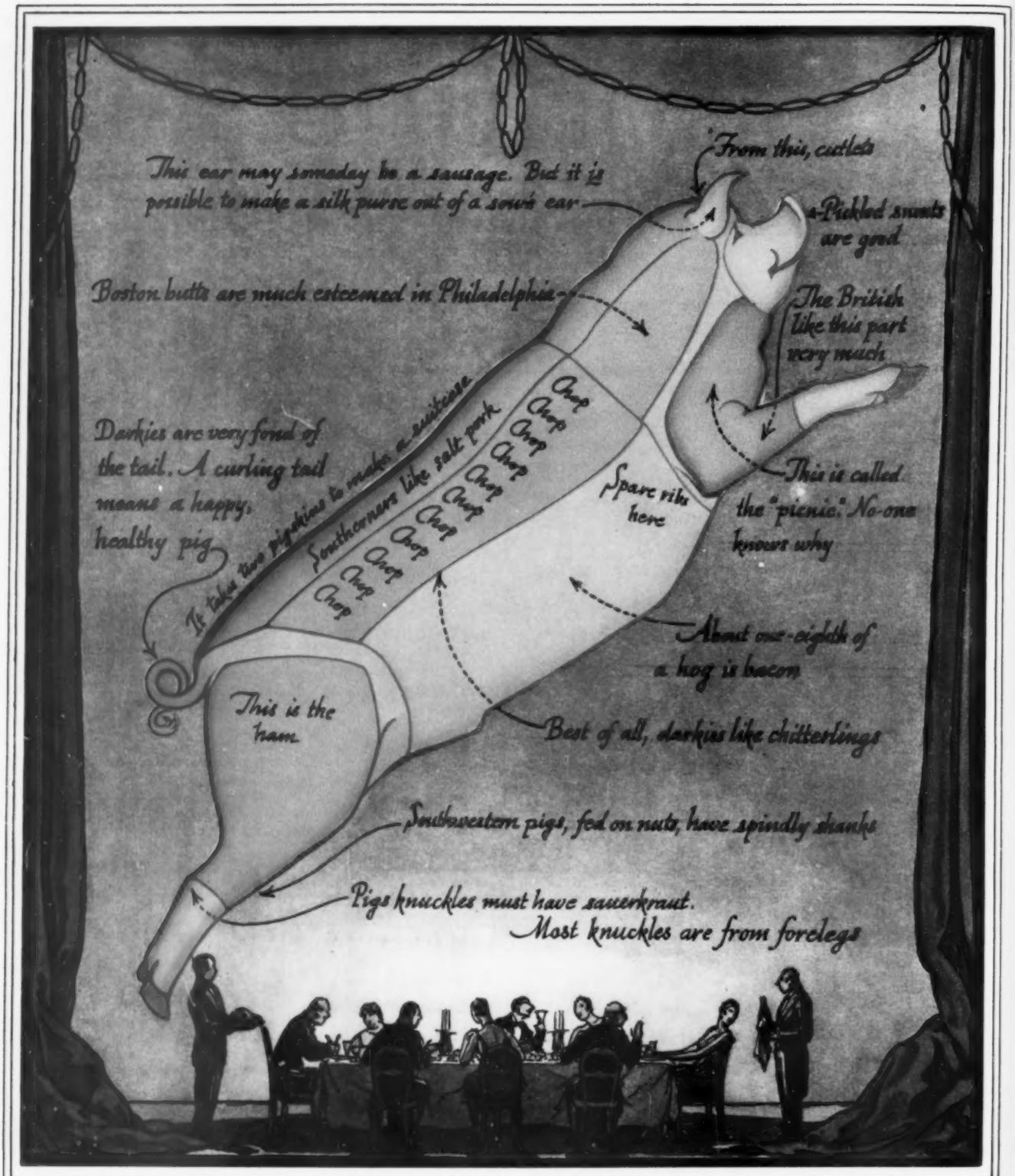

This ear may someday be a sausage. But it is possible to make a silk purse out of a sow's ear
From this, cutlets
Pickled snouts are good
Boston butts are much esteemed in Philadelphia
The British like this part very much
Darkies are very fond of the tail. A curling tail means a happy, healthy pig
It takes two pigskins to make a suitcase
Southerners like salt pork
Chop
Spare ribs here
This is called the "picnic." No-one knows why
About one-eighth of a hog is bacon
This is the ham
Best of all, darkies like chitterlings
Southwestern pigs, fed on nuts, have spindly shanks
Pigs knuckles must have sauerkraut.
Most knuckles are from forelegs

NO ACORN COULD FIND ITS BEARINGS WITHIN A PIG BY STUDYING THIS MAP. NOR COULD A BUTCHER NICELY CARVE, NOR COULD A BIOLOGIST WRITE HIS THESIS. BUT SUCH A MAP—INFINITELY MORE DETAILED—GUIDES THE PACKERS OF PACKINGTOWN AS THEY SLICE INTO PROFITABLE PARTITIONS, 8,000,000 PIGS EACH YEAR.

Tsaa-a Tsaa-a Tsaa-a

The Packer does more for less money than any other industrialist. Herein his business is described with special reference to Pigs and to Swift & Co., which has just entered the billion-dollar class.

SWIFT & COMPANY, butcher for 20,000,000 persons, buys no raw materials. Its cattle, its sheep and its hogs are finished products. Year after year it spends some $500,000,000 for these beautifully assembled mechanisms and proceeds at once to disassemble them. By countless individual acts of destruction, Swift & Company paradoxically increases the value of products which are the result of countless individual acts of creation.

Unlike automobiles and watches, these mechanisms are easier to put together than they are to take apart. Certain kindly laws of nature aid the farmer. The hog, for example, will grow at the rate of about one pound each day and the farmer may confidently expect that his product will be more valuable tomorrow than it is today. Swift & Company deals with natural laws less kindly, if not actually hostile. Fresh meat in uncontrolled temperatures will spoil at a rate much faster than a pound a day. These two chemical manifestations, one of life and one of death, govern most of the economics of the livestock and packing business. As it is harder to deal with deterioration than it is with growth, the packer's problem is the greater.

In meeting it, the packer has gradually created one of the largest industries in America. Standing astride the Mississippi, he reaches with his right hand into the great agricultural states, producing two-thirds of all U. S. livestock, and with his left hand hurls $3,000,000,000 worth of steaks and chops and hams toward the huge population centers of the East. The motorcar maker at Detroit puts no greater value into the automobiles he sends spinning across the earth. Nor does the movie producer at Hollywood. If the figure is too large to be grasped, bring it down to terms of the individual. To each man, woman and child in the United States, some packer distributes each year 170 lbs. of meat and lard[1]. (Numerals refer to explanatory notes in the Appendix.)

Chicago is the industry's center; the stockyards are its major clearing house. Into the yards, in 1928, poured a living stream of 15,500,000 animals. The stream at Omaha was half as long; at Kansas City a little less than half. At 67 markets, the total reached the enormous figure of 93,600,658—a hog, a steer or a sheep for every adult inhabitant of the U. S. and several other countries.

In such tremendous mass is the packer's salvation. Swift & Company in 1928 made a profit of less than ¼ cent a pound on the meat and by-products it bought from the farmer and sold to the public. But it sold 5,500,000,000 such pounds, and was able to net nearly $15,000,000. Compared with its almost $1,000,000,000 gross sales, the profit was ridiculously small, about 1½%. In 1929, its profit (per pound) was about the same, but it pushed its total volume over the $1,000,000,000 mark, joining an extremely select list of gigantic U. S. corporations. Swift, like Armour & Company (which does about the same business), and the smaller Wilson & Company and Cudahy Packing Company must have enormous volume to exist. Together, these four packers dress more than 40% of the country's federally inspected meat; yet their combined net profit in 1928 was less than the profit of Ford, duPont, U. S. Steel or General Motors. This is not a mysterious problem; it is clearly understood and bitterly fought by every intelligent packer. With livestock buyers for 1200 packing plants competing in the U. S. markets, price levels are kept as high as demand allows. And on the other hand, these packers are buying against a consumer's market of two, three or even six months hence. A quarter-cent bargain in November may become a two-cent loss by March.

Each packer fights low returns with various weapons. Swift has built up a huge business (more than 70 plants) in dairy produce, eggs and poultry. It is one of the largest distributors of butter in the U. S. These not-entirely-meat-packing activities, together with commercial fertilizers, bring in about $250,000,000 each year, or about one-quarter of the business.

A vast organization keeps this industry in motion. More than 55,000 men and women work for Swift: about one-sixth of them in the pivotal, all-important Chicago Packingtown and stockyards; a fifth in its 400 branch distributing houses spread across the U. S.; a third in its 37 smaller packing plants; the remainder in its $50,000,000 export trade, its 6,000 refrigerator cars operating over more than 600 car routes and its other activities. After volume, motion is the prime necessity of the packing business. To Swift's plants come each year more than 17,000,000 animals. Their killing is the starting gun in a race against time, against the uncertainty of markets and the certainty of eventual deterioration. Waste of time is as great a sin in Swift's Book of Commandments as waste of material. Against both, it wages intricate and interesting war.

The hog is assembled

Roughly measured, the period of usefulness of a hog covers about twelve months. In the first nine, beginning with the farrowing, the farmer prepares the hog for market. The end of this effort of creation is the hog's sale to the packer. In the last three months, beginning with the killing, the packer prepares the hog for the public. This period ends when the last product of the hog is in the hands of the consumer. As one may go behind the hog's birth to its biological beginnings, so one may project its economic life into a chemical future. But for the purpose of studying the hog, this crucial year allows enough scope.

Each period has its own dilemmas.

EARLY MORNING ARRIVALS AT PACKINGTOWN

Of the farmer's troubles, sickness is the most immediate, and marketing time the most baffling. So steadily does the farmer consider the price he will get for his hogs that every four years he thinks himself out of many millions of dollars. In 1922, the farmer could sell 16 bushels of corn for only $9, which was the price of 100 lbs. of hog. Pondering this, he decided that in 1923 and 1924 he would not sell his corn, but would feed it to his hogs and sell the hogs. Thus by 1924, the number of hogs slaughtered (under federal inspection) had jumped from 43,000,000 to 53,000,000. The price of 100 lbs. of hog fell from $9 to a little over $8, and the 16 bushels of corn, which in 1922 were worth $9, in 1924 were worth nearly $16.

Again the farmer pondered. Apparently his idea had been wrong. It had become more profitable to sell corn as corn than to sell corn as hogs. Reversing his economics, he so reduced the hog supply that in 1926 the hog prices went to $12, and the value of his 16 bushels of corn dropped to $12.

Added to this large cyclical problem are the seasonal ups and downs of hog marketing, with prices rising in the off months and falling when the winter runs are heaviest. There is even a day-by-day fluctuation in the Chicago market, a fluctuation which the packers and thinking livestock producers are working to eliminate. Normal December receipts in Chicago average between 10,000 and 60,000 hogs each day. Yet one Monday, December 15, 1924, the packers were appalled to find no less than 122,749 hogs jamming the stockyard pens. In one day the price fell $1.75. Now the farmer gets market reports four times a day by radio. Quickly figuring the comparative values of corn and hogs, he decides whether to ship at once (by train or truck) or hold for a better market. If too many become frightened on a falling market, the result precisely parallels conditions on the New York Stock Exchange last October.

Here in the hog alleys is as keen trading as may be found in the world, conducted almost without the aid of speech. There is no lack of noise. Into the pens strides Fred Young, Swift's veteran buyer who looks like John W. Davis. He pokes the hogs with his stick and says "Tsa-a". Everybody pokes hogs with stick and says "Tsa-a, Tsa-a". The hogs grunt. Mr. Young judges. Then he comes out to where the commission firm's salesman is standing. Young looks at him, waiting for a price. The seller utters one word: "Ten". Fred Young moves rapidly on. He is not ready to pay $9.10 per cwt. for hogs weighing 180 lbs. His price, set by wise Sven Lund back in the general offices, is $8.90, based on the outlook for demand for pork and the supply of hogs.

Often Mr. Young spends much time, after the market opens, in dickering before he makes any purchases. The buyer for Miller & Hart (Berkshire brand) may pay the asked $9.10 for the load. Smaller packers and order buyers frequently set the early market. Fred Young waits, telephoning the market trend back to the wise Sven, who is in touch with all the principal markets. Many times he yields to a rising market, pays $9.10 or even $9.20, because the reverse of his judgment is often true. A nod from Young, a nod from the seller, closes the deal. There are never misunderstandings. Each day the packers pay in cash; Swift's *daily* average for livestock for the year is about $1,250,000.

Thus ends the period of creation. The farmer's work is done. The hog, completely assembled, is in Packingtown.

The stockyards

Almost everyone has seen a farm; almost everyone feels himself reasonably familiar with it. Each year 200,000 visitors are guided through the visitors' route at Swift & Company plants; not a dozen of them leave with a thorough understanding of the Chicago stockyards and Packingtown. Conceive, if you will, a square mile (640 acres) of reclaimed swamp sliced out of the middle of a city of 3,500,000 persons. Bound it on the east and northeast by the black belt, on the north by a factory district [Wrigley's, Standard Sanitary, Starck

Piano Co., Henry Bosch Co. (wall paper), Certain-Teed Products Co. (roofing), Chicago Portrait Co., etc.], on the west by the foreign sections, on the south by a modern and prosperous shopping center. Within are some 50,000 men and women, absorbed in destruction. They are of all castes, all races. Once the majority were Irish; now the Irish have gone and in their places have come Slavs and blacks. Watching them on the killing floors, in the dressing plants, one notices their splendid physiques, their clever hands. Or perhaps the knives are more impressive than the hands which guide them. Hundreds and thousands of clean, flashing knives.

The eastern third of the yards belongs to the livestock men. Here they bring or send their hogs and cattle, riding up and down the alleys on fine horses to dicker with the buyers. The fencing about the pens gives the effect, from above, of a gigantic grey checkerboard. Here and there, over the pens, long grey arms point to the west. These are viaducts for men and for animals, routes to offices and to killing houses. From time to time they tremble and roar under a drive of steers. Intensely proud of their profession are these men. They trace their Scotch or English ancestry back through generations of cattlemen. In the old English dining-room of the Saddle & Sirloin Club, they are watched by the portraits of their fathers' fathers.

Only the most important livestock men ever penetrate farther west than the end of the alleys. Beyond, and in the central third of the stockyards, are the offices of Swift, of Armour, of Morris (Armour-owned), of smaller packers, Roberts & Oake, Miller & Hart and others. Here, too, are the visitor's routes through killing houses and model kitchens, through laboratories and community markets. To the east is the odor of the barnyard; here in the Swift general office building the air is washed and no windows are open. The precaution is wise, although in this central portion there are many sweet-smelling places. The smoke-room, where row upon row of Premium hams are perfumed with the smoke of wood fires. A tiny room in the sausage plant, where spices are mixed for flavoring. The huge tanks of cottonseed oil in the refinery, rich and earthy and edible. All of them fine scents, grateful after the machine-odors of any plant.

IN THE ALLEYS, WAITING TO BE JUDGED

Here, too, is the locus of the Brothers Swift. Once there were Armours and Morrises as well as Swifts, but with the sale of Morris to Armour and the reorganization of Armour, the other old packing families have almost disappeared. In the far northwest corner of the yards, almost outside the gates, the Wilsons still run the business bought in 1916. But five sons of the late Gustavus Franklin Swift are now the reigning aristocrats of Packingtown, and a sixth functions in Boston.

Rich as they have become (each could retire whenever he liked), splendid as their homes, these Swifts are not out of place in the yards. Their tradition is no less compelling than the tradition of the cattlemen or the tradition of the clever knives. Very close are the Swifts to their business. Only one, Harold, has any major outside interest. He is president of the Board of Trustees of the University of Chicago. It was Harold who went to the Yale Law School to bring 31-year-old Dean Robert Hutchins to become Chicago U.'s prodigy president. It was of dark, grave Harold that British Sir Josiah Stamp once said: "How extraordinary! It is only in America that a butcher could become a university head." He was the only Swift to go to college. He is the only Swift bachelor.

Harold is distinguishable among the Swifts by the extent and importance of his activities outside the yards. Within the yards, G. F., named for the Founding Father of the Swifts, is equally distinguishable. Boss of the plant's operations, he is the family's most practical meatpacker, a good judge of hogs.

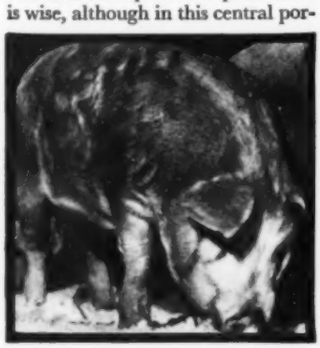
Louis F., President of Swift & Co., is the eldest son of the Founding Father and Edward F., the second son. As a boy Louis could buy, weigh, kill and dress a steer. Now he is less the meatpacker than he is the executive, but he is still a hard-working, simple-living business man. Outside his office is a stand-up desk where Louis transacts much of his business. Gladly he leaves university affairs to Harold, social affairs to the suave Charles H., husband of Claire Dux, an excellent soprano.

The early beginnings of the Swifts were on Cape Cod, and years ago another brother, George H., feeling the insistent tug of New England, refounded a Swift home in Boston. Here he handles many Eastern Swift activities, finding time also to be chairman of the board of National Leather, a onetime Swift subsidiary, which now attends to its own business.

The company is very conscious of its Swifts, counts them as potent weapons in its unending duel with Armour & Co., nearly bereft of Armours. That a second generation should still be in packinghouse shirtsleeves fills the company with pride; that a third generation comes on (although not in great force) makes the cup of Swift joy overflow. Young Alden, son of Louis, is the third-generation representative in the yards. His departments include beef, purchasing, transportation and by-products, a large assignment, but Alden has ability. In Denver, head of the Swift plant, is L. F. Jr., the other third-generation Swift who carries on.

The Swifts breathe washed air; surrounding them are white mahogany offices, the Swift radio station, the kitchens where each day pound cakes are baked with new, Swift-devised shortenings, the refrigerators filled with pretty, packaged chops and cuts, for all the world like a confectioner's window. This is the silk-stocking district of the yards. Even the killing floor, for all its blood and guts, has somewhat the air of being on parade.

Only a few steps westward and the parade comes to an abrupt end. Few visitors venture far into the western part of the plants; they would not be comfortable there. On one hand rise the plants of a company with a euphonious name (Darling & Company) and the malodorous business of rendering meat trimmings from butcher shops.



Across the narrow alley are Swift's by-product plants. Heaped outside the bone house are the heads of cattle, in awful pile; inside are grinders which belch forth clouds of dust. The odor is not pleasant. Swift supplies the workmen here with filter masks. Some use them and some do not. It is wiser to use them.

Thus the Packingtown in which the farmer's finished product finds itself.

The hog is disassembled

The major adjustment which the hog makes as it moves to the last quarter of its year is of course the change from life to death. This is the only adjustment which can conceivably be of concern to the hog, and it is a curious thing that it should be of such little concern to Swift & Company. If killing is the chief function of a butcher, then the Swifts are not butchers. Exactly 25 minutes elapse between the time the live hog reaches the killing floor and the time the dressed carcass goes to the cooler. By the left hind foot he is hoisted athwart a giant wheel, then delivered to a conveyor from which he hangs, squealing, head downward. A mammoth being with a spear-like knife makes a quick, deft thrust at the hog's throat. The adjustment is made.[2]

Beautifully certain are the ministrations of the killing room to the rows of carcasses which were hogs. An incredibly intricate nest of blunt knives scrapes every hair from the hog's skin; nearby stand government inspectors, slicing the neck-glands, to search for tiny white spots which are tuberculosis. Off comes the head; it is put to one side. One deft ripping motion and the inside of the carcass is as clean as the outside. A twist of giant tweezers and the toenail clatters to the floor. Now the procession moves through a bath of fire to singe off the last of the hair, a bath of water to cool. The rhythmic rise and fall of a cleaver rends the backbone. On and on come the carcasses, perhaps 20,000 of them, a fat pink parade curling through blades of steel.

From the killing floor the carcass moves to the cooler for twenty-four hours, then to the floors where men and machines carve it into dollars and cents. Here is a mechanical saw which grinds through the shoulder; there is a draw knife like a curved adz which scoops out the loin. Hundreds of white-sleeved arms swing back and forth. Hundreds of funnels gulp the morsels the knives flip aside. Some gulp lean trimmings; these will make sausage. Some gulp fats; these will make lard. Down one chute go the hams, trimmed to within 1/16-inch of standardization; down another pour shoulders. To the waiting refrigerator cars is rushed the fresh meat, ready to travel to a branch house in Seattle or Atlanta. But the hams and the bacon must go to the curing cellars, there to remain from 30 to 90 days—and the toenails, the hair, the fats, the lips, still have long weeks to wait before their processing is complete, before the hog has been perfectly destroyed.

In this gradual dissolution there is no accident, no happenstance. When the live 250-lb. hog begins his run across the viaduct to the killing-floor, he is already divided and subdivided as exactly as a suburban real estate development. Swift knows that when the knives are through with him, there will remain:

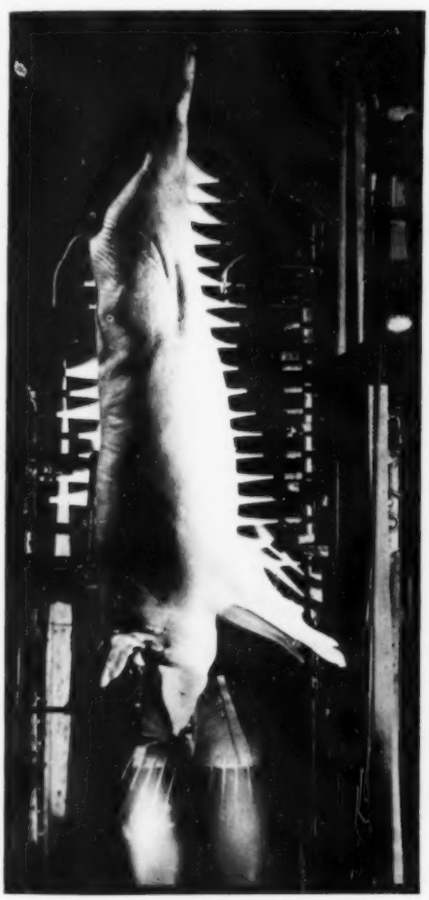
HEADS DOWNWARD, IN GRAVE PROCESSION ACROSS THE KILLING FLOOR, 20,000 HOGS ARE ALWAYS MOVING

Of fresh meat (loins, Boston Butts, spare ribs)	37.50 lbs.
Of hams (to be cured)	32.50 "
Of bacon (to be cured)	29.37 "
Of fat backs (salted)	23.75 "
Of lard	22.50 "
Of picnics (smoked shoulders)	12.50 "
Of clear plates	6.87 "
Of sausage (about 1/50 part of the hog live weight in the form of lean trimmings)	5.63 "
Of jowl butts	5.63 "
Of various edible products such as feet, necks, tails (popular with negroes), cheek and head meat, ears, snouts (often pickled) and lips	7.50 lbs.
Of edible by-products such as kidneys, stomach-linings (sold to pepsin makers), gullet and giblet meat	5.62 "
	189.37 lbs.
Shrinkage accounts for	51.25 "
	240.62 lbs.

There still remain 9.38 lbs. of hog to be use-

FROM LIVE HOG TO DRESSED CARCASS—25 MINUTES

fully destroyed. There are hides (to be tanned into pigskin), hair (to upholstery), bits of skin and sinew (to glue), grease (to lubricants), blood (to stock foods), bone (to bone-handles, buttons, bone-dust). In the by-products houses are whirling cylinders of blood, soon to be dried to dust. Another room is carpeted with thousands of glittering white shin-bones, forming fantastic geometric patterns. Once they were changed to Mah-Jongg sets; now they become knife-handles and buttons. In the glue house, fragments of gristle swim about in open tanks; their liquor will be condensed, then dried, then ground to the inevitable dust: dark brown cones of powdered glue. Fragments of fat are rendered for lubricants (not lard) or distilled for grease. Even the water from the tanks is partially evaporated and its grease skimmed off, then evaporated again to make food for animals.



EACH HOG IS SINGED BY CLEANSING JETS OF FLAME

But even after these by-products have been isolated from the 9.38 lbs. of residue, there yet remains an ultimate remnant. From this Swift prepares, in giant cooking vats in the animal-food house, a brew which it calls digester tankage. Its ingredients are fragments of skulls, toes, hair, knuckles, and the ultimate remainder of every previous process in the vast Swift plant. Once these remnants went to the fertilizer tanks; thus the brew had its christening. Now they are dried and ground. In a misty storeroom are piled 1500 tons of this tankage, macabre mountains of meal. Its protein content is fixed by law at 60%; it makes good stock food. Here is the final achievement of the Swift disassembly, the visible sign of the shopworn adage that the packers use every part of the hog but the squeal.[3] Weirdly incongruous are the heaped-up remnants which roll up to the by-products plants in bright red wagons; when they come out, they have merged their identities in useful dust, the last product of destruction.

Swift's horror of waste has produced many curious deals in Packingtown. One of the most valuable to mankind has been the supplying of pork glands for insulin and sheep glands for adrenalin. One of the most curious is the sale each year of several pounds of gall stones, collected from the killing rooms. These are bought, for well over $100 a pound, by mysterious Orientals who do not divulge their purpose. Swift supposes, but does not know, that they are used as charms or for medicines.

The great problem of physical waste Swift has mastered. When the Founding Father strode along that evil-smelling stream known as Bubbly Creek, he would stop at the openings of the Swift sewers. If he saw any fat coming out, he knew there was waste in the packinghouse. Back he stormed and someone smarted. No fat issues from Swift's sewers today. That leakage has been stopped.

The next problem is harder to solve, and Swift has not yet conquered it. In the chemical laboratories, in an atmosphere of test tubes and constant-temperature-rooms lies the key to Swift's immediate manufacturing problem. Having eliminated the waste in the product itself, the remaining step fairly shrieks itself through Packingtown:

Eliminate the waste in Time.

Nine months will produce an 180-lb. hog; 25 minutes will kill it and send the carcass to the cooler; 24 hours will chill the meat; 15 minutes will see it cut into its hams, its shoulders, its bellies (bacons) and its loins.

But in the curing process, in the barrels of pickle (salt, sugar and nitrate), the hams and the bacon remain for from 30 to 90 days. And some dry (or summer) sausage must hang in the drying rooms for four months before government inspectors are satisfied that no suspicion of trichina[4] remains. By the time these have been shipped to branch houses, distributed to dealers and sold to the consumer, the hog's year is up and the period of destruction may be said to be complete. Such enormous stocks as Swift has always in storage obviously complicate its marketing situation; the packer must buy his supply in November for a conjectural demand in March. Now the Swift laboratories experiment ceaselessly with quick cures. The preservation question they have mastered; they can cure in comparatively few hours. Not yet have they found a way to duplicate the flavor of the slow cure.

GIANT MEN AND SHARP KNIVES SPEED THE DISASSEMBLY

TRIMMING THE BELLIES WHICH WILL BE BACON

Swift's future

In these laboratories are many odds and ends which help paint the Swift picture. Here is a room devoted to experiments with gelatin and motion picture films. Here is another where scientists are improving the dry rendering process. Already this process (which substitutes continuous rendering by means of steam-heated coils for rendering in steam vats, with the consequent escape of odors) has made the yards a more habitable place. Swift's scientists would do more if they could, would make the Chicago plant as sanitary as the model exhibit at Toronto. But the buildings are old and there is the ever-present problem of Swift's neighbors. Swift might clean house, but would the small packers to the west? The issue rests.

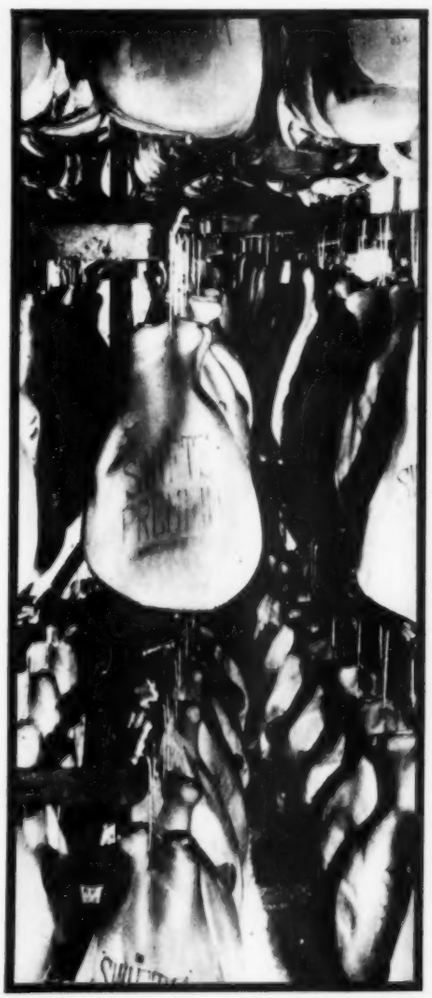
These laboratories are now the scene of experiments which may have a profound effect on Swift's future. With the tremendous effort to perfect the frozen meat process, the fundamental principles of which were established by Swift in 1903 (see page 62), Swift makes what is probably the last and most important effort to evolve a distributing machine equal to the "disassembly" plant at Chicago.

From a production standpoint, further Swift progress would be almost an improvement upon perfection. Yet Swift & Co. itself does not at all contemplate a process of marking time, or of resting upon its reasonably assured net income of $15,000,000 per annum. The greatest (and most difficult) Swift step forward lies not in manufacture but in distribution —in the revoking of the famous Consent Decree to which Swift and other large packers consented in 1920 and which has since become the outstanding obstacle of packing house expansion.

The Consent Decree was arrived at in settlement of a threatened government suit against Swift, Armour, Morris, Cudahy and Wilson, then and now (except that Armour has absorbed Morris) the largest units in the packing industry. Facing anti-trust proceedings, the packers agreed not to handle such so-called *unrelated* lines as the packaging of canned fruits and vegetables; agreed also not to enter the retail business. Today however, the situation is very different in two vital respects. In the first place, smaller packers, not parties to or bound by the Consent Decree, have gone into the retail business, and in the second place, the retailer, in the shape of the great chain store systems, has gone into the packing business, one chain now operating two packing plants and a large sausage factory. So, seeing other packers retailing, and seeing retailers packing, Swift *et al.* consider the Consent Decree, under present conditions, unfair and discriminatory, and attack it often.

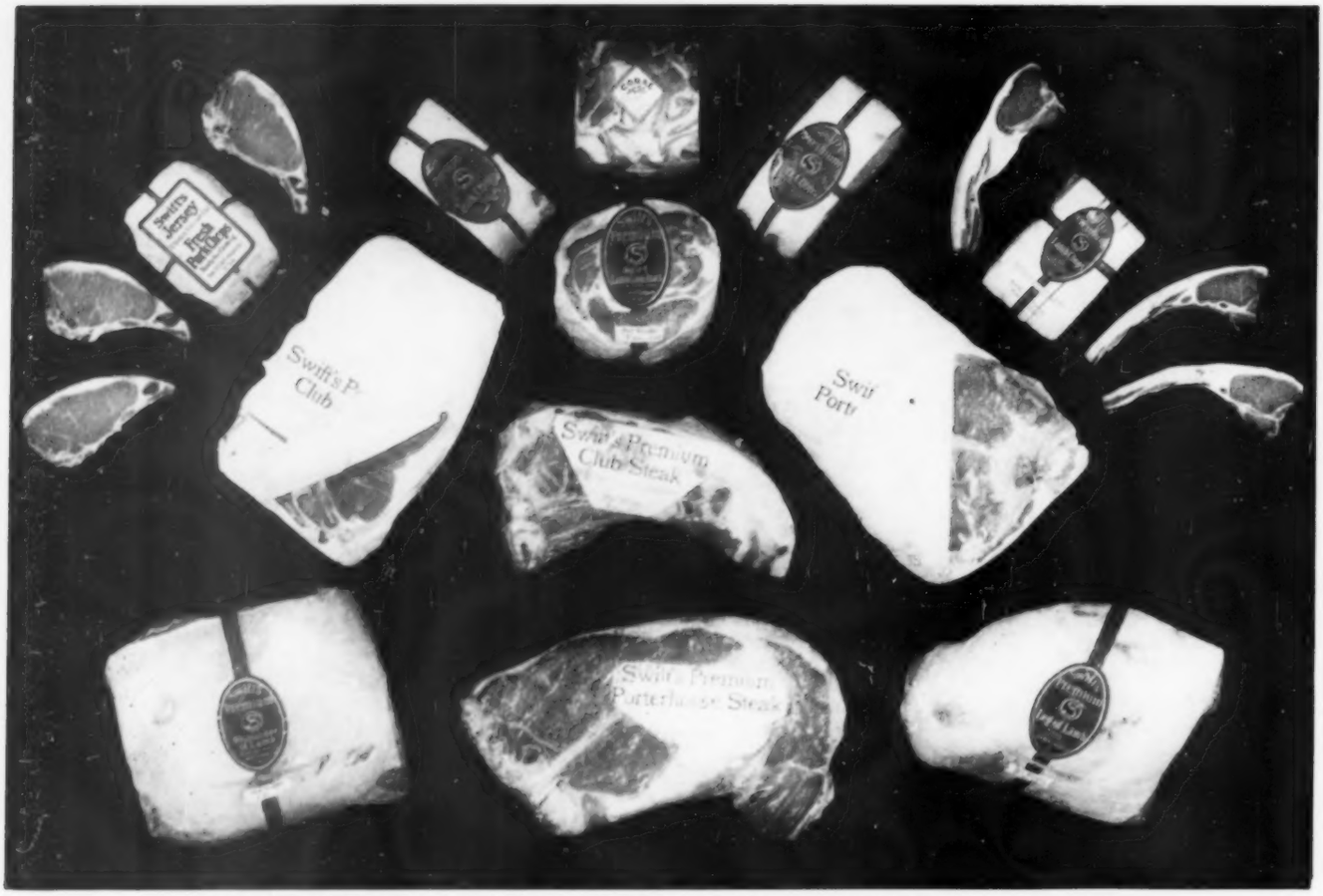
Meanwhile, however, nothing but an unimaginable outbreak of vegetarianism can interfere with Swift's basic structure and basic prosperity. While trade commissions may investigate, while the new and cultural Chicago may deprecate and disown the square mile of stockyards, Swift remains secure in its billion dollars business, in its income of millions piled up from profits of one quarter of a cent per pound of meat. It has 57,000 stockholders, (including 25% of its employees) and last month it announced a four for one stock split to give more investors (and employees) an opportunity to hold its securities. As to not being a speculative favorite, that position has its alleviations, as evidenced by the fact that there was a relatively small spread between Swifts' 1929 high (149⅞) and low (121).

Thus Swift & Co., butcher for 20,000,000 meat-eaters. When G. F. Swift, that brusque, sardonic Yankee, first came from Cape Cod to dress meat at the source of supply, he could not have visioned so tremendous a service. Volume has made it possible, and ice, and advertising. Man, no longer can hunt his quarry and bring home his kill, but he is still carnivorous. Swift & Co., with the knives to cut meat, the ice to preserve it, the cars to transport it, faces the future with small misgivings. For it is the modern minister to a timeless and primeval want.



ROWS OF HAMS IN THE FRAGRANT, SMOKY, CURING-ROOM

IN MAMMOTH DUST-HEAPS ENDS THE PIG. COMPLETELY DISASSEMBLED, HIS REMAINS GROUND TO PUNGENT DUST, HE FULFILS HIS FINAL FUNCTION AS GOOD FOOD FOR ANIMALS. IN THIS SWIFT STOREROOM ARE 1500 TONS OF RICH PIG-DUST, MACABRE MOUNTAINS OF MEAL.



PACKAGED STEAKS, CHOPS, SHOULDER, LAMB STEW, THREATEN THE LOCAL BUTCHER'S FUTURE

A Second Ice Age and its Priestess of Antisepsis

NO DISCOVERY has had an effect upon the geography of the race comparable to that of the modern preservation of the stuffs of food. It has piled people by the millions, one on top of the other, a thousand miles from the nearest source of beef. It has loaded a small island in the north Atlantic with a population greater than England's in Shakespeare's time. It has enabled an army larger than the nations of past time to fight for years in a stripped land. Conversely it permits a sheep grower in the Antipodes to sell his mutton half way round the world and a fruit grower in Oregon to ship his peaches to a year from the following May. It levels out bumper crops, cancels famine and produces metropolitan civilization. Chicago (it is no reflection on the new-made land to say so) stands upon a billion cans. So does New York. And London. And Berlin.

Or, more exactly, on an acreage of cans and ice. Canning was attempted during the Napoleonic Wars, accomplished in the 1840's and commercially perfected in the next decade. But canning alone would not support the weight. Canning has no quick answer to the problem of raw food. Potted beef and tinned tongue build no cities. It was not until refrigerating plants rolled out on rails to link the slaughter houses with the city shops and carry cod to Texas that the change took place. Ours is as much a second ice age as an age of steel. Forget the art of simulating ice, or making it, or keeping it, and the steel will not stand long.

Unlike other innovations with vast social consequences, the first modern use of refrigeration in the preservation of food involved no basic scientific revelation. It is a matter of very ancient human knowledge that a fat goose, frozen and hung in winter out of the dog's reach, will be good to eat. Artificial cold merely carried the chance effects of winter round the year and into climates that had never known them; and the skill of the engineers was expended in the perfection of the means. They were concerned with ice-making machinery, cold storage plants, insulation, refrigerating cars. The problem was to keep your meat or fish at a temperature which would suspend bacterial action and deliver it to the retailer in that condition. There was no need for an original biologist.

What has happened in the last decade or more is that the nature of the problem has changed. Metropolitan Civilization, made possible by the commercial preservation of foods, has produced the Metropolitan Purchaser. The Metropolitan Purchaser lives in a small apartment rather than a large house. She has no children, or two, instead of four or seven. She has a telephone on her kitchen wall and she orders food from day to day in small quantities as she needs it. She has ideas about bacteria, a religion of antisepsis and no place to put a quarter of beef. She will not accept crackers out of a barrel nor pickles out of a tub, but buys both in sealed containers with the trade mark of a reputable manufacturer stamped on the lid. If she still goes to the butcher shop or the fish market to buy a hand-cut morsel from an anonymous carcass she does so because she has no alternative or because she is accustomed to the method; not from choice.

The problem, that is to say, has become primarily a problem of selling by retail, and only incidentally a problem of preservation. How can the dealer in perishable meat and fish imitate the dealer in flour, turn out a trade-marked, packaged, factory product of uniform value and participate in the profits of such a market?

[*Continued on page 120*]

Banking, Group and Branch

A 10,000-word survey of the chief current problem in American finance.

AND who, a certain lawyer asked, is my neighbor? To him the Teacher told a story of a man who, between Jerusalem to Jericho, fell among thieves and was rescued by a Samaritan.

Mr. Henry M. Dawes, younger brother of the Ambassador and onetime U. S. Comptroller of the Currency, is a stoutly articulate opponent of intercommunity branch banking. The possibility that some New York bank may some day have branches in 1,000 cities he views with an alarm almost Spenglerian in its pessimism. But he does not at all object to the National City Bank having 37 branches in New York City. Why? Because "the customer of the branch can still maintain contact with the owner and the controlling executives of the institution, who are his friends and neighbors".

The spectacle of an East Side Greek restaurateur maintaining contact with Mr. Percy A. Rockefeller, one of the largest stockholders of National City, or of a Brooklyn longshoreman in neighborly antics with Mr. Charles E. Mitchell is calculated to paralyze with mirth almost any customer of the said bank, and, indeed, even Mr. Dawes could not gravely contemplate such sights. And yet, Mr. Dawes did not inadvertently utter an absurdity. What he said is probably related to a truth the profundity of which staggers our inadequate imaginations and which he himself but faintly grasps. Who is your neighbor? Are we or aren't we all?

The Secretary of the Treasury has officially notified the Congress of the United States that "the time has come" to do something (first, an investigation) about the increase of branch banking and group banking throughout the U. S. The Comptroller of the Currency has more sharply defined the issue. Thus begins one of the most verbally violent conflicts in recent history. Rarely is the subject mentioned without use of the word "revolutionary". "Seismic revolution" is the phrase of the Economic Policy Commission of the American Bankers Association. In Congress, the speeches began with this sonorous period from the Hon. T. Alan Goldsborough: "The control of credit means the control of business, the control of politics, the control of schools, and the control of churches". What looks to the ignorant like a harmless question of banking technic easily becomes an awful portent of disaster to man's very soul. It appears that there is nothing which is not pertinent to this subject. In reviewing it we shall raise only the most necessary questions; but they will be many. Of the many, the greatest is this: who is my neighbor? All peoples have asked this question and made their answer their history.

Branch Banking

When fire and earthquake wrecked San Francisco in 1906, Amadeo Peter Giannini, a tall, broad-shouldered bright-eyed Italian of 36, rushed to the Bank of Italy, started by him two years before. As flames reached the building, he removed its gold and securities, carted them to safety. When order was restored the Bank of Italy was doing business in the home of Dr. Attilio H. Giannini, Amadeo's brother. Special receiving tellers' desks had been set up along the waterfront to handle the money of the produce men. Thus disaster-born, makeshift, unofficial, were the first branches of the Bank of Italy. But in creating confidence and admiration for the produce dealer who had suddenly turned banker, they proved more profitable than his Bank of Italy's 300 subsequent branches. To Banker Giannini the incident brought a realization that diversification in banking as in everything else can bring safety. It was the beginning of a career which has been an irritant to American finance ever since.

Three years later the Bank of Italy opened its first official branch, buying the Commercial & Savings Bank of San Jose, then a town of 28,900, about 50 miles from San Francisco. To California this was not the first evidence of branch banking. Before the Civil War two Canadian banks had branches in the State, and some of the pioneer banks had established branches. But this was the first modern, aggressive step toward the development of a banking plan that within 20 years was to make the branch at San Jose only one of some 300 Bank of Italy branches, that was to change the Bank of Italy's capitalization from $150,000 to $50,000,000, that was to enable Giannini to head a giant holding corporation controlling resources estimated at $2,000,000,000.

Enemies of Giannini explain this growth by maintaining that Giannini is merely a banking manipulator, making bad use of California's branch-permitting laws, drawing on the faith of Italians; his adherents claim he is a man who has led banking to its natural, evolutionized form—a form hindered elsewhere by unsound anti-branch legislation. The arguments of both will be discussed later, are significant here only

This article is an interesting and comprehensive analysis of the present trend in banking developments in this country. In view of the fundamental economic situation which has given impetus to the organization of group banking systems and to the growth in branch banking, it is desirable that these developments be carefully studied, not only by Government officials charged with the responsibility for possible legislative enactments but by the banking and business world.

Hasty legislation, either to liberalize or to constrict limitations now in effect, should be avoided; but the time has come when it would seem wise to undertake a thorough study of the situation with a view to determining the soundness of the present day tendencies and more particularly the limits of the economic areas within which branch banking may be advantageously permitted.

It is appropriate that the first issue of this new magazine of business should devote so much space to a study of this very important question.

A. W. MELLON
Secretary of the Treasury

to illustrate that, good or bad, branch banking developed early in California where the prejudice of locality failed before the pride of Californians in their state and the pride of Giannini's first supporters in their race.

Slow at first was the Bank of Italy's expansion. But in 1920 financiers who had long scoffed at Giannini were advocating that he be restrained. The Anti-interests elected a governor who, assisted by the California League of Independent Bankers, did his best to stop Giannini. Public rumors had it that this emigrant's son was backed by the Pope, had a branch in the Vatican, was a monopolist, had created a Great California Bubble, explosion of which would wreck the state.

Against these opponents Giannini fought by entering politics himself, which he had done before in San Francisco municipal elections. Fortunately for his cause, he had always believed in wide stock ownership, thus had many scattered supporters, was able to elect a "friendly" governor. Furthermore he himself refused to become very rich,—"worth less than a million" —which to this day bewilders slicker financiers.

When it was seen that legislation could not block the Bank of Italy, its opponents who had already tried a few branches went vigorously into the movement, especially in Southern California. In 1928 the famed Fleishhacker Brothers ("Herb" & "Mort") formed the Anglo National group of banks. Another combatant appeared only last August when the Goldman Sachs Trading Corp. of New York purchased the American Co., controlling the American Trust Co. which has long angled for San Francisco's distinguished Crocker banks.

But it was too late to combat the Bank of Italy with its own methods. Its branches were state-wide, had gone through a terrifically rapid expansion before entering the National Banking system in 1927. The Bank had long passed the condition where it depended upon Italian support. In June 1929 it had 1,500,000 customers, more than 14 times the estimated Italian population of California. Its management became coördinated and systematized. Its early policies, which had been ridiculed, began to yield returns. One of these policies was a ready access to executives and a general lack of austerity. Thus when the Bank reached a tremendous size, it was able to maintain the personal element demanded by the small customer. Another was the "school savings" plan by which children were made depositors. Conservative bankers who had laughed at the idea realized suddenly that the plan had made the Bank of Italy harder to combat, for statistics showed that practically all of these accounts were maintained and brought in others.

So in a field free for branch banking, the Bank of Italy became the dominant bank with branches, although many big commercial accounts remained in the hands of such California bankers as the Fleishhackers and Crocker. This at first could have been explained as a California phenomenon, made possible by the feeling of unity present in the state, plus lax regulations. But in 1928 Giannini had made a move that startled American bankers. He bought the Bank of America of New York, an old institution (founded in 1812, having as its first president Oliver Wolcott, son and namesake of the Declaration of Independence signer). Then he grouped all interests (including the aggressive firm of Blair & Co. which soon merged with him) into the titanic Transamerica Corp.

Staunch in his faith that branch banking would eventually become nation-wide, Mr. Giannini announced last September that the Transamerica Corp. would seek to have 500,000 scattered stockholders, boosters for future Giannini banks in every state.

In Giannini then is branch banking personified. It is his conception of banking, his open discussion of it, that has shaken the "traditional" conception of banking, has caused legislators, Cabinet members, Presidents, to try to visualize what it means beyond the mere mechanics of the system. The best U.S. example of a working intercommunity branch bank is his Bank of Italy, serving agricultural districts, mining towns, industrial cities, fishing villages. Upon Giannini's premise that branch banking is natural, beneficial, profitable, turns the future of American banking and, we shall see, a criticism of American civilization.

Group Banking

Not the least amazing aspect of the recent, and especially of last year's startling developments in American banking is that the inspiration has not come from New York, but has been as far from New York as possible. His entrance into New York was only a climax to Mr. Giannini's drama which, like an Aeschylean discussion of the gods, troubles the philosophy of a nation.

Most contemporary of phenomena is, however, not branch banking but group banking; not the Bank of Italy but Transamerica Corp. And the classic theatre of group banking is neither New York nor California, but Minnesota and the contiguous states which constitute the Ninth Federal Reserve District.

On Jan. 8, 1929, Edward Williams Decker, President of the Northwestern National Bank of Minneapolis, announced the organization of the Northwest Bancorporation. He did not coin the hybrid word; that had been originated by a smart fellow named Andrew Price who christened the Marine Bancorporation of Seattle in September 1927. The word has been adopted far and wide although there is still some difficulty in making yokels say Ban-corporation instead of Banc-corporation. The word is good since it contains that magic derivative of the Italian *banca* and yet does not fall foul of the law which dislikes to hear anyone call himself a bank if he is not a bank. And the Northwest Bancorporation is not a bank. It is a corporation essentially similar to the Wrigley Chewing Gum Co. or Standard Brands, Inc. It is called a "holding company"—which almost any corporation could call itself if it so desired. It differs, however, from the Wrigley Co. in that in asking for a charter, it remembered to tell the Delaware Secretary of State that it particularly desired to acquire the stock of banks. Which it right forcefully set about to do.

It began business with an authorized (not actual) capital of $300,000,000, almost three times greater than the capital of the largest bank in the U.S. This was divided into 6,000,000 shares of $50 par value. By Nov. 1, 1929, it had issued $71,100,000 worth of this stock, of which $10,000,000 had been sold for cash and the rest had been issued in exchange for the capital stock of 84 different banks. Of the 84, about half were in Minnesota and half in seven other states, which judged by local standards are nearby. In the eight states over which the Northwest Bancorporation cast its name, there are 119 cities with populations greater than 10,000. In more than half of these this Bancorporation owned a bank, and officially announced: "It is fair to assume that, eventually, there will be located in *each of these cities* one or more banks affiliated in this Group [i.e. Northwest Bancorporation]". Pause to reflect we must, for an astounding vision looms. These banks in each and every city are not to be labeled branches. Indeed they retain their former names and have separate boards of directors. But the Bancorporation means that every man, woman and child within motoring distance of a 10,000 population town in any of eight states will be invited, nay, urged, to place all his or her money under the protection of a bank whose capital stock is controlled by the corporation of which Mr. E. W. Decker is president. Literally all of Everyman's money—or for the matter of that, all his easily transferable wealth. For, of course, the Bancorporation promptly organized a securities vending concern, and it includes trust companies so that it can provide investments for all the living and estate-handling for all the dead. This can happen, even though the local law flatly forbids banks to have branches, because the Law, so vainly unimaginative, never dreamed of Bancorporations, much less of prohibiting them.

Ogreish? Certainly not. Continue the tale. The formation of the Northwest Bancorporation was as redolent of patriotism as any event in recent U.S. history. Not Nathan Hale patriotism, for it exhibited nothing of sacrifice: the goal is profit. But Drake and Raleigh patriotism, yes; for the profit was to be sweeter since it was to come from the increased greatness *and* glory of the Country. The Country in this case is not the United States of America, but The Northwest. No map marks out this Country. In an early issue FORTUNE will do so. Vaguely it is miles of earth, miles of sky. A big part of it is known to bankers as the Ninth Federal Reserve District. This part contains some cities the world has heard of—Minneapolis where Pillsburys, Washburns and Crosbys have made flour unto the third generation, where Peaveys and Heffelfingers have produced giant elevators (grain) and men (footballers); St. Paul, whence Hill the Empire builder, his son and his son's son, whence statesmen, and on whose flank are stockyards; Duluth, fecund Iron Mother. But mostly you have never heard of the cities—Lead, Deadwood, Rapid City dominate the Black Hills (Coolidge 1927) section of South Dakota. All the towns of North Dakota with a population of more than 5,000 are: Bismarck, Fargo, Devils Lake, Jamestown, Minot. In Montana are Anaconda, Billings, Bozeman, Kalispell, Missoula; back in advanced Minnesota are Bemidji, Cloquet, Crookston, Hibbing, New Ulm, Rochester, Stillwater, Virginia, Winona. (Winona's bank was founded in 1854—oldest bank in the Bancor-

poration.) It would be mawkish to say that Mr. Decker carried all these names engraven on his heart as Mary, Calais. His mind's eye sees more often the vast things the little towns command—mountainous pits of copper, of zinc, lead and iron; spindle-footed sheep sillily bearing a fleece to mantle mankind; lonely rails; land; milk.

This is the Ninth District; but the Bancorporation reached South, took Iowa through the big bank which served Des Moines' 400 manufacturers; took Nebraska through meat-packing Omaha. Also it rather curiously absorbed a bank in Spokane, Wash., which makes the next story.

Far from being a lone star (as Giannini may be said to have been) Mr. Decker was rather the presiding spirit of a noble conspiracy which included half the leading men of the Twin Cities. In the stolid idiom of our day, Mr. Decker explained it: "Along with other bankers and businessmen, we of the Northwestern National Bank felt a growing sense of responsibility for the financial welfare of this territory. . . ." With Mr. Decker were, and now on the Bancorporation's Board are, such names as Pillsbury, Crosby, Bell (General Mills), Budd (Great Northern Railroad), and the Chief Justice of the state. And when banks in other states came in, other tycoons came in as conspirators in equal standing. Their conspiracy was, of course, to give financial power and security to the Northwest they loved. So excellent was the conspiracy that they had not been operating six months before an almost exactly similar conspiracy united the other half of the leading men of the Twin Cities. In April Clive Talbot Jaffray announced the formation of the First Bank Stock Corporation. Whereas the Northwest Bancorporation had acquired banks in eight states, this new holding company announced that it would confine its efforts exclusively to the Ninth Federal Reserve District. Otherwise the aims and methods of the two corporations are almost identical. And here is a recent table showing what banks each owns:

No. of banks in:	Northwest	First
Minnesota	42	36
Montana	6	13
N. Dakota	9	12
S. Dakota	9	10
Michigan		3
Wisconsin	7	
Iowa	4	74
Nebraska	6	
Washington	1	
	84	

A FEW OF THE LEADING BANKING GROUPS, WITH RECENT STATISTICS, INCLUDE:

	Date formed	Banks in group	Resources
Transamerica Corporation (Successor to Bancitaly Corp., formed 1919)	1928	20	$2,800,000,000
First National-Old Colony Group (Boston, Identified with D. G. Wing.)	1929	19	700,000,000
Detroit Bankers, Inc. (Reputed "Fisher" connections to both this and the following group.)	1929	23*	700,000,000
Guardian Detroit Union Group, Inc..	1929	23*	550,000,000
Marine Midland Corp. (Bankers Rand of Buffalo, Stauffen of N. Y.)	1929	17	534,000,000
Northwest Bancorporation	1929	84	465,000,000
First Bank Stock Corporation	1929	74	444,000,000
Wisconsin Bankshares Corporation	1929	27	290,000,000
Anglo National Corporation (San Francisco's Fleishhackers.)	1928	21	278,000,000
Banco-Kentucky (Louisville, President: J. B. Brown.)	1929	4	215,000,000
Shawmut Group (Boston)	1928	6	211,000,000
First National Bank Group (Atlanta)	1929	6	125,000,000
Southwest Corporation (Tulsa, Okla.)	1929	10	90,000,000
BancOhio Corporation ("Wolfe Interests": H. P. Wolfe, three sons and nephew.)	1929	4	85,000,000
Financial Institutions, Inc.. (Maine; President: Publisher & Banker Guy P. Gannett.)	1929	9	68,000,000
Marine Bancorporation (Seattle)	1927	10	54,000,000
First Security Corporation (Utah. Identified with Mormons Eccles and Browning.)	1928	25	48,000,000

*Estimate before actual organization.

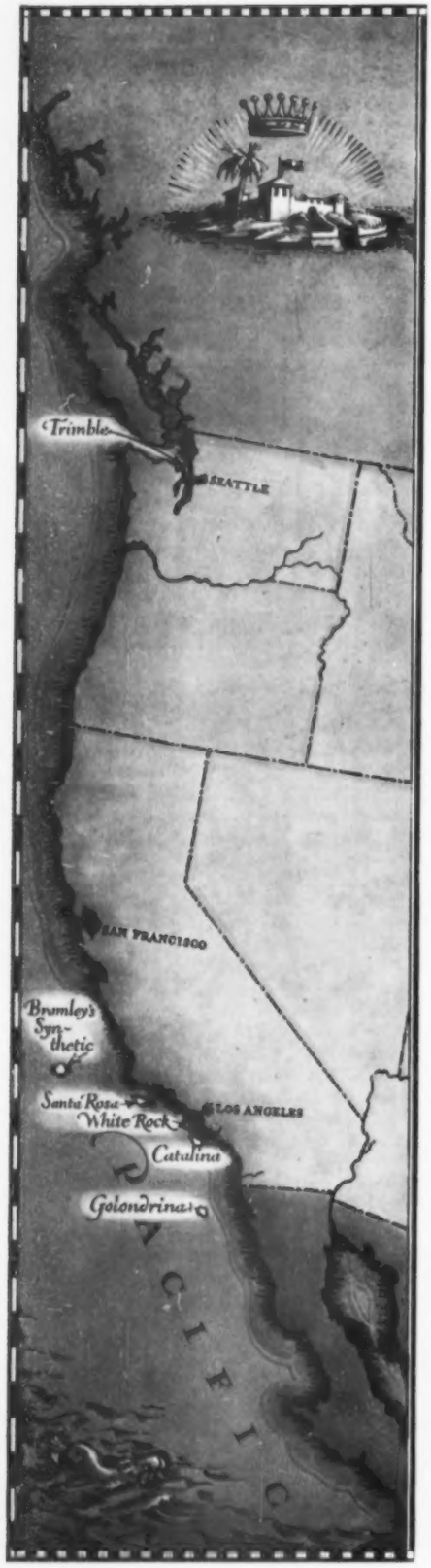
Total resources of the Bancorporation were $465,000,000. The First Bank Stock Corporation followed hotly with $444,000,000. Between them they control 58% of all the bank resources in Minnesota and their average age is less than one year. For all its dramatic suddenness there were, of course, decades of history behind the formation of both the Decker and Jaffray groups.

This, of course, is revolution—a turn of the wheel, not disruptive, quite peaceable, nevertheless a full turn. Well, therefore, may John W. Pole, U.S. Comptroller of the Currency, say: "In the absence of government permission for branch banking in its true sense, present developments indicate that group banking, under the force of economic law may eventually displace the present system of country unit [i.e. independent] banks." And Mr. Craig B. Hazlewood, recently President of the American Bankers Association: "I believe group banking will develop further, that there will be standards for its handling which will make it a permanent and sound business."

The good that can be said for group banking is obvious, and the evils are difficult to state. In the first place, the evils are theoretical as none have yet developed. Second, you cannot indict group banking without indicting almost the entire business aristocracy of the Northwest. In short, no corpse, no case.

But difference of opinion, which is immediately important, arises from the question whether group banking is or ought to be regarded as a precursor to branch banking. Many of the 107 directors of Northwest Bancorporation think it ought to be. Mr. Pole, of course, prefers regional branch banking to group banking. In New York, the venerable *Commercial & Financial Chronicle* is savagely hostile to group banking and branch banking: "If the head bank [of a group] loans disproportionally it is a leech upon the members. If the pooled credit is distributed ratably it has gained no more than it would by a system of correspondents." And an anonymous economist concluded that "a good argument for branch banking is that it would tend to check chain banking." The feeling is simply that unit banking is one system and branch banking another, which neither a Webster nor a Bancorporation could logically reconcile. But while bankers frequently exhibit a childish incapacity for ratiocination, we must also, in such matters, distrust the perfect logician. Certainly the two rival giants of the Northwest do not base their claim to existence on the prospect of branch banking. On the contrary they sing, for the present, a song of independence-within-unity, a song of Federation sweetly harmonious with American Tradition. And, finally, let us record that their song is vigorously applauded by a large part of the population of their territory which understands it. For now many businessmen of these states feel that they are no longer barbarians outside the pale of high finance. Now they have safety. Now they have service on a metropolitan scale. Now they have financial institutions of such magnitude that—whether it be participation in the bonds of the world bank or some more trifling matter—they will have duly elected representatives in the councils of the great. The business

[*Continued on page 136*]



Island Kingdoms

Behold the 20th century refugee. Off shore he builds his home, makes his laws, flies, if he will, his own flag.

ALONG the marshy shores of Grand Isle, Louisiana, creeps the diamond-back terrapin, a reptile, the very thought of which makes an epicure's mouth water. Devious are the ways of the terrapin, for he lives neither on land like his cousin, the tortoise, nor in the sea like his cousin, the turtle. In brackish sea marshes, where salt and fresh waters mingle, he disports himself, lazily navigating the creeks and browsing upon the periwinkles that cling to every blade of eel grass. So multitudinous are the periwinkles that, except for his human foes, the terrapin would greatly increase and multiply on this easy food. There was a time, indeed, when terrapins were so common in the southland that they were fed to slaves, and were said to annoy fishermen by choking up their seines. Today fishermen would not be at all annoyed, for diamond-back terrapin ranks with truffles and caviar as a gastronomical delicacy.

Grand Isle is easily the centre of the terrapin industry. There lives John Ludwig, the terrapin king, whose pens are the most extensive in the world, and who ships north each year about 75,000 of the creatures. Snaring them over a wide area, trappers bring them in to the Ludwig pens, where they are fattened for a while on fish, blue crabs, oysters and fiddlers, and then sent north, mostly to the New York market, in barrels of ice. On this island, too, live nearly 1,000 cucumber cultivators. And in happy profusion are oysters, shrimps.

Just north of Grand Isle is Las Conchas Island where some years ago oil was struck, not oil for engines but oil for salad. On it was born the Wesson Oil & Snowdrift Co., Inc., whose chief parent, Mr. A. D. Geoghegan, quite logically owns the island. Here is a seventeen mile wilderness of beach, live oak jungles and marshes that produce 20,000 muskrat pelts a year. But guests on Mr. Geoghegan's yacht, the Sweetheart, generally see a more civilized Las Conchas: an artesian well, a sewage plant, a plant for making ice, a 125-acre pecan orchard.

All along our coast are islands like these, privately-owned kingdoms on the shores of a democratic mainland. Far north in Maine is John's Island, retreat of the steelmaking Lauders and south of that is tiny Mouse Island where Harry Emerson Fosdick finds relief from urban sophistication. And along the Pacific too are strewn the kingdoms, Mr. Wrigley's Catalina, and William Pitt Trimble's Trimble Island. More and more our wealthier and retiring citizens are coming to realize that in this industrious age there is only one means of living to one's self, to retreat to a body of land completely surrounded by cold, deep water. As a symbol of great possession the privately owned island may yet supplant even the steam yacht. Certainly our shores are already fringed with these private kingdoms, each with some strange, distinctive feature, strung along the coast line from the St. Lawrence to Puget Sound. To tell of all would be impossible but to learn of some, read further:

Canada

Chocolates

Only an island emperor could single-handed establish prohibition over an area the size of Connecticut. As "chocolate king" of France, Henri Menier had a natural antipathy to liquor, immemorial enemy of sweetmeats. When he bought Anticosti, the "Isle of Shipwrecks" that sprawls its huge bulk across the St. Lawrence, M. Menier decreed that his realm should be dry, and dry it was. Down to the smallest detail he drew the plans for his mansion on the island, insisting that every plank should be screwed into place. Although he had intended to live in solitary splendor in his mansion, whither he brought objets d'art, rare furniture and tapestries, he soon began to develop Anticosti commercially. He had planned a hunting lodge that was to be the talk of the Paris boulevards. Instead, he put up a pulp mill. Shrewdly, he built fishing camps which he leased to Americans, imported from Europe a thousand farmers with their families to settle on his island, established some lucrative silver fox ranches. When he died, his island was worth many times the $175,000 that he had paid for it. Three years ago his brother sold Anticosti to the Wayagamack Pulp & Paper Co., Ltd. for $6,000,000, a nice profit for the estate but not too high a price for the enormous island.

Castles

Architecturally, at least, Heart Island in Alexandria Bay is a mediæval barony. New Yorkers sailing past its towers and turrets find them curiously reminiscent of their own Waldorf Astoria Hotel, which was wrecked last year. This is no casual resemblance, for George C. Boldt, owner of the Waldorf and outstanding among hotel men of a generation ago, once planned to make the island into a summer home for himself and his wife. Their plans were ambitious, and the architects and builders were

told that money was no object. From the Boldt quarries on Oak Island came barges of granite for the walls of the castles, the Alster Tower, and the Romanesque power house. These buildings had been nearly completed; the island had been changed into the shape of a heart; a fish pond, a lake for swans, an Italian garden had been created; about $2,000,000 had been spent on the project. Then Mrs. Boldt died. All work was stopped; the workmen left the island. In a few years the gardens were overgrown with weeds, the ponds choked with water plants; the buildings suggested mediæval relics, their stone chambers empty and silent. Though Mr. Boldt returned to the St. Lawrence, he never visited Heart Island again.

Maine

The Simple Life

On Chanterelle Island there is a semicircle of twelve small cottages connected by flagged walks. In the centre is a dining hall and kitchen; down by the shore a large recreation hall straddles on piles over the water. To this little township come each summer its owner, Miss May Hannis, of Bala, Pennsylvania, her sister, and their friends. Aided by a Kohler power plant, an artesian well, three motor boats, and a small staff of servants, they lead the simple life. The rustic charm of the island has carefully been left untouched.

Flannel Shirts

When the vanity of urban life weighs too heavily on Harry Emerson Fosdick, he retreats to Mouse Island in Boothbay Harbor, which he owns jointly with G. Ellsworth Huggins. They too have preserved the natural beauty of their thirty-acre island, whose spruce and pine trees are rooted on bedrock. Dr. Fosdick says of his island: "It is far enough from the mainland so that we can live an entirely unsophisticated life; that is to say, a man can put on a flannel shirt in the morning and go to bed in it at night if he feels like it."

Candles

Every summer for thirty-five years Dwight Blaney and his family have deserted Beacon Hill, Boston, for the rugged fastnesses of Ironbound Island, four miles from Bar Harbor. There Mr. Blaney and his friend, John Singer Sargent, have painted many landscapes, hunted mink and red squirrel with a pack of retrievers. Though Ironbound has a model farm and a fleet of power boats, no electric lights are snapped on at night. The only form of illumination Mr. Blaney will allow is the soft light of candles.

Sanctuary

The largest heronry on the North Atlantic coast is at one end of Bartlett's Island, which is owned by Augustus Peabody Loring and William Caleb Loring, Boston patricians and men of law. By their intercession the three square miles of Bartlett's Island form a legal game sanctuary, attracting many a deer, fox, mink, rabbit, partridge. Muskrats and black duck breed in its ice pond. The brothers Loring, beefeaters, do not extend their protection to domestic animals, maintaining an island slaughterhouse for their own livestock. Although the Lorings maintain three comfortable houses and a twin-screw cargo boat, they bar the telephone and electric light from their island as rigidly as they ban shotguns. For twenty-three summers kerosene lamps have lighted their houses. Three generations ago there was a township of fisher folk and a dozen farms on the island, but today only the Lorings enjoy its woodlands and pastures or walk along the shady roads.

New Hampshire

Codfish

Rockbound, tourist-ridden, the Isles of Shoals cluster together outside Portsmouth Harbor. There is Star and Cedar and Appledore and Smuttynose and Lunging, all of them small and neighborly. If the Rev. Mr. F. B. Crandall should sell his Lunging Island, he would do well to exhibit it to prospective purchasers at low tide only. For when the tide comes in, his island rapidly dwindles from five to a modest three acres. The late Frank Ferguson, of Cram and Ferguson, architects, once lived on the island in "Honeymoon Cottage," which he remodeled after designs from his own office. This cottage, summer and winter, is always ready to receive shipwrecked mariners. Two of its doors are never locked; a fire is laid in the Franklin stove; there is oil in the kitchen range and canned goods on the shelves; and the owner sees to it also that there are plenty of blankets on the beds and dry clothing in the closets. The Rev. Mr. Crandall is landscaping his three permanent acres, setting in beds of old-fashioned perennials, planning a rock garden and a sunken garden. A crowning symbol, there will arise a flagpole bearing as a weathervane a gilded codfish.

Massachusetts

Peacocks

Wrote Joshua Crane, Harvard '90, to his classmates: "I have just been elected King of No Man's Land, southernmost island and piece of land in Massachusetts." "Josh" Crane is a versatile sportsman: he has four times been National court tennis champion, has coached Harvard football teams, and was a member of the Dedham Polo Club team that defeated the Westchester Club for the National championship. On his No Man's Land he has a shooting lodge, imports from Hungary pheasant, ducks, and geese to make the sport more interesting. Peacocks strut on the close-clipped lawns that surround the main house, set in the midst of flat, treeless moors.

Feudal Forbes

For three generations Naushon Island, near Martha's Vineyard, has been the private domain of the ancient, important Forbes family of Boston. Sheep graze in its meadows and deer

[*Continued on page 147*]

LIKE A MODERN GABRIEL SOUNDING HIS HORN, THIS WORKMAN PUFFS AWAY, EYES BULGING, CHEEKS DISTENDED. AND IT IS INDEED A LAST TRUMP HE IS SOUNDING: THAT OF HIS OWN TRADE. FOR HE IS A BLOWER OF GLASS, WHOSE CALLING HAS GONE THE WAY OF ALL CRAFTS BEFORE THE INVADING MACHINE.

Sand into Glass

New machines replace ancient skill. But at Corning, N. Y., industry still finds use for the power of human lungs and René Lalique keeps 600 men to crystallize his designs.

ASK a chemist about the ingredients of glass and he will talk about silicon. Perhaps the simplest definition of silicon is that it is one of the things that the earth is largely made of. Silica, an oxide of silicon, comprises about three-fifths of the earth's crust. Next to oxygen, silicon is commonest of elements. No politician would refer to the silicon-bound shores of Maine, yet the rocks of Maine (or of almost any other locality) have in their makeup a large silicon content. So common a substance as quartz, or oxide of silicon, represents one member of the silicon family in relatively pure state. And a combination of carbon and silicon gives carborundum, hardest substance next to the diamond.

Now the glass maker probably does not take much interest in silicon, nor is it necessary that he should. Glass was made long before probing scientists discovered and labeled the silicon family. From the layman's standpoint, glass is made chiefly from sand. But sand is simply the crumbled fragments of rocks—that is silicon oxide in a conveniently powdered form. Children will probably never fall off to sleep under the impression that the $Si O_2$ Man is coming for them, but from a chemical standpoint the great sand-piles represent merely a usable and transportable silicon supply.

A SHOVELFUL OF SAND IN THE HANDS OF A BRAWNY WORKMAN IS THE GENESIS OF ALL GLASS

MASKED MEN WHEEL THE SAND TO THE MIXING ROOM

To the workmen in the glass factory, however, sand is simply sand, and plenty of it. Standing amid heaping dunes of white particles (like Cape Cod brought inland or a small section of the Sahara) the workman shovels them into a waiting hand-cart. A mask covers his mouth to keep the fine dust

KNEADING THE OVEN CLAY—OLD STYLE

out of his lungs. Other men, also grotesquely muzzled, trundle the cart into the mixing room. Here the sand is mixed with litharge or lime, with soda or potash or borax, and with any one or more of a hundred other ingredients depending upon the purpose for which the glass is intended. Originally sodium salts were obtained from sea water and potassium salts from wood ashes, but today these salts are obtained mostly from salt deposits. The largest deposit of potash salts is in Germany. During the war there was a shortage of potash outside of Germany and it was necessary to return to wood ash as a source. Since then, however, an adequate American supply has been obtained from Searles Lake in California. Sodium salts have always been very plentiful and the largest commercial consumers are obtaining their supply from so-called "salt wells" located in various parts of the United States.

ONLY A WOODEN BRICK AIDS THIS MAKER OF CLAY POTS

After the batch has been properly made, it goes next to the furnace. Here, in the application of heat, is performed the major glass miracle—the transformation of opaque particles into a transparent solid. Silica, like the rest of the earth's crust, was formed by the cooling of the molten, liquid masses of which the interior of the earth is still composed. In its molten state, it is not only a liquid, but also a transparent liquid. So when the silica in the glass furnace is heated and melted, a transparent liquid results. And if, as in the glass factory, it cools off in the space of a few hours instead of through the centuries that it took the earth's crust to cool and solidify, it cools so rapidly that it is still transparent when it has become again solid. If it were left alone for a few hundred thousand years it might go back again to the rock whence it came.

The furnace tending job in the glass factory is much like the corresponding job in a steel mill. The sandy batch is cooked in clay pots or tanks, not only because clay can stand higher temperatures than steel, but also because there is some unexplained hostility between steel and silicon so that when molten glass comes into contact with steel its surface becomes roughened and spoiled. Twenty-six days are spent in the building of a clay pot and six months in drying. Modern glass making is shifting away from the comparatively small, hand-built pots to large tanks with greater capacity and about a year's life.

Mixing and heating produce the transparent liquid from which glass is made. Shaping it is the glass-blower's business. It is an extremely hot business, because although molten glass is easily workable the cold glass is of course the familiar brittle substance through which boys so readily throw bricks. So the glass worker must work with his material still hot, as though the steel worker had to build a locomotive out of molten steel. Over the glass-blower's head is a ventilator to spray him with cool air. Water-cooled metal screens protect him somewhat from the withering heat which gradually crumbles the inside of clay pots eventually causing their discard. His mouth is ringed with tough flesh from long applications to blow-pipes. His palms are calloused from contact with hot irons. But he is a skilled worker, a well-paid worker, and he has the craftsman's pleasure in watching something shape itself under his hand.

The glass making itself is divided into two general operations—gathering the molten glass from the pot, then working it into its final form. A young workman thrusts a long iron blow-pipe into the fiery pot. He twirls the pipe around to gather on it a blob of molten glass, like twirling a knife to get honey out of a jar. Out comes the pipe, a glowing, viscous mass collected on its end. Then the pipe is passed to the master workman, who blows into it, twirls it in arcs like a bandmaster's baton, spins it deftly between his hands. He must work fast before the glass cools and hardens. His manipulations sprout on the end of the pipe a swelling growth of plastic glass which he places into a mold at his feet. When he or his helper has clamped the mold shut, he puffs into the pipe. The glass swells up inside the mold, taking on its final shape. The blower lifts it out, inspects it for flaws, puts the pipe with the finished glass still attached into a rack to cool down. Then he or a boy detaches the glass from the pipe and it is put on an endless belt on which it travels gradually from hot to cool temperatures.

The processes just described are essentially hand processes; the glass industry, indeed, from the time of the Egyptians and Phœnicians was dominated by the hand worker. Even as recently as 1900—a full century after the period generally covered by references to the "mechani-

THE POTS ARE SHOVED INTO BLAZING FURNACES

cal revolution"—the worker in glass had no machine competition. The industry in this country was virtually controlled by *Local 300*—a glass-workers' union which had built up a labor monopoly and dictated even to the glass manufacturers themselves. One manufacturer—the American Window Glass Company—put a $500,000 block of its stock in trust for the union and gave the union representation on its board of directors.

In 1908 came the introduction of the first glass-making machinery—an innovation against which *Local 300* sternly set its face. None of its members were permitted to work in plants where machinery was used; defiant, the union adopted an uncompromising *No Surrender* attitude toward the machine invasion. Instead of adapting itself to the machine (it might, for example, have extended its membership to the relatively unskilled machine-tenders) the union insisted that in the glass business, at least, the modern world should move at a mediæval pace. Eventually, of course, the machine triumphed. It learned to perform more and more of the operations formerly sacred to the handworkers' skill. By 1922 the tide had definitely turned toward the machine; by 1924 *Local 300* had lost its position as wage-fixer for the industry; in 1927 the union made a belated and unsuccessful attempt to unionize unskilled labor; and in 1928 *Local 300* disbanded. Said its president, in its obituary notice: "No human agency could have saved the hand-craft . . . The mistake we made was in clinging to the old guild idea. That has no place in modern American industry."

Largest units in the glass industry today are Owens-Illinois Glass Co. of Toledo and the Pittsburgh Plate Glass Co. Owens-Illinois (whose merger with Continental Can Co. is indefinitely postponed) is in the container field, manufactures ink bottles, perfume bottles, druggists' bottles, bottles of every kind. It makes about 50% of the beverage bottles used by Canada Dry, White Rock and Clicquot. The Pittsburgh company (in which the omnipresent Mellons are interested) makes plate, window, spectacle and mirror glasses and a side line of paints, lacquers and solvents. In both companies the majority of operations are mechanical.

THE APPRENTICE GATHERS THE MOLTEN GLASS

Thus, after some 5,000 years of unquestioned supremacy, the skilled glass worker fought and, in 20 years, lost his battle with machinery. It should not, of course, be concluded that there is no skilled hand labor remaining in the glass business. Few industries become so thoroughly mechanized that the human element in the equation reaches the zero value of pulling a knob or turning a handle. Furthermore, there are many glass making operations in which the hand worker is still indispensable. Bottles and other ordinary containers; window-panes and other sheet products belong to the machine. But in the manufacture of laboratory apparatus, of decorative ware, of odd-shaped, non-standardized and small-volumed glass products, the glass-worker still follows the trade of his forefathers in much the way that they followed it. There exists, and there will always exist, a place for the skilled craftsman. But it is not the high place from which he so recently fell.

In the production of artistic glassware the craftsman still reigns supreme. The Corning Works have their Steuben division, where white-haired old glassmakers slowly mold and blow vases, bowls, candlesticks, and such decorative articles. But the center of modern glass craftsmanship is in France. There René Lalique, slender, trim-mustached, with the look of a scholar, is hard at work in his Paris atelier. He is drawing designs for every sort of object—bowls, perfume bottles, doorknobs, chandeliers, candelabra, intaglio seals, dinner plates—and all to be executed by his hundreds of glass craftsmen. From the two Lalique workshops, one at Fontainebleau and one in Alsace, flows an uninterrupted stream of vases, clocks, bottles, glasses, plates, picture frames, bowls, on which are etched or molded birds, beasts, flowers, fruits, fishes, nymphs, satyrs, and every sort of decorative device. The shops of Europe and America sell these products. The New York specialty shop, Jay-Thorpe, has a room designed and executed by Lalique to display his wares in which even the doors are of etched glass. And Lalique did an all-glass bathroom for Corinne Griffith.

Commercially, René Lalique is as successful as any man in France. Yet he knows little of "business" and cares less. He willingly delegates all business matters to assistants. Occasionally he visits the shop in the Place Vendôme where the products of his two factories are sold, but he is more interested in what is being sold than in sales volume. He wanders from cabinet to cabinet, sharply examining the contents. Stopping in front of one, he carefully picks two small crystal figures out of it. He turns to the head of the shop: "These must be destroyed. Phone immediately to the factory, tell them to make no more of them and to destroy the molds. They are not good." Fortunate is the craftsman who works for such a master.

Steadily laboring in his Paris atelier, refusing to see most visitors and talking to those he does see of only one subject: his work, René Lalique turns out an amazing number of designs—

THE BLOWER'S FINAL INSPECTION

enough to keep 600 men busy crystallizing them into glass. Their skilled hands and eyes and lungs are indispensable to their master. It would take a very clever machine to satisfy M. Lalique. It would have to execute his designs, which employ every sort of motif from frogs to rosebuds, and to execute them in the most delicate detail. It would have to mold and turn out unbroken the feathery tails of peacocks and the flowing robes of a wood nymph. It would have to etch a thousand and one designs on glass, sometimes lightly and sometimes in deep relief. And it would have to be able to change from one design to another as easily and quickly as a workman lays down one piece of work to pick up another—for M. Lalique wants none of that infinite repetition that is the chief strength of the machine.

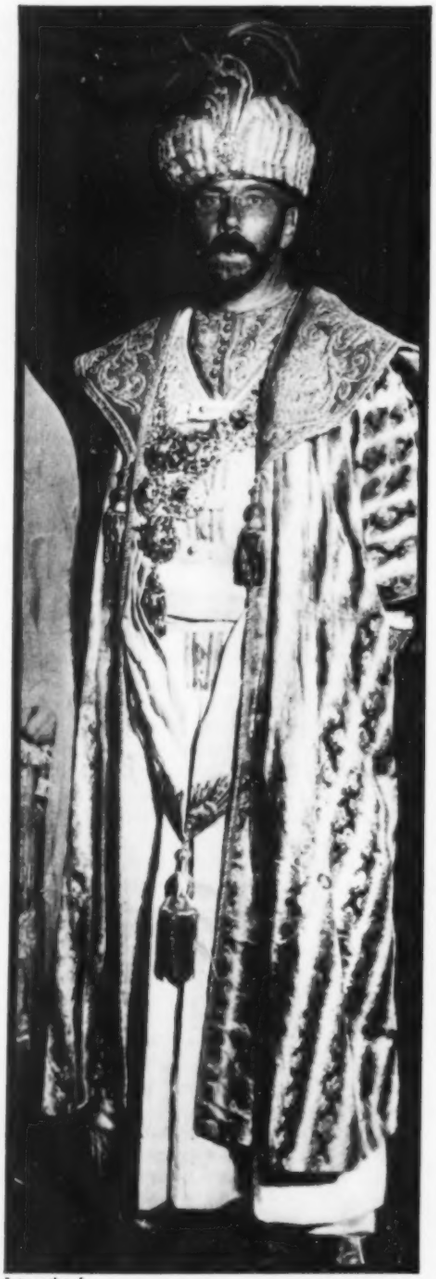
Portrait of

A Gentleman Funded Proprietor—this civilization's best example.

THE most conspicuous thing about Arthur Curtiss James is his *Aloha* and the next most conspicuous thing is his beard. Each is a splendid example of its type. The *Aloha* is the largest square-rigged yacht in the world and one of the most beautiful ships ever to sail the seas. The beard is an austere frame for a burly, sailorman face. No one can see the *Aloha* spread its 21 sails and forget the sight; few men have met Arthur Curtiss James and have forgotten the beard.

So glittering are these peaks on the James horizon that one is easily misled into believing the general visibility is good. Actually, the world at large knows less about Mr. James than about any other man of comparable importance. Thus it is that in spite of his wealth (and he is one of the richest men in the world), he has been neither greatly hated nor greatly loved. Beyond the *Aloha* and the beard is an able businessman, an active sportsman, a philanthropist and a gentleman. With none of these personages, who combine to make up Arthur Curtiss James, is the American public familiar.

It is not altogether because Mr. James has sought to avoid that familiarity. Although he has. Nor because he has done nothing dramatic enough to engage it. Although he is not given to dramatics. The reason is more general. The American public is totally unfamiliar with the type of person Arthur Curtiss James represents. It does not place him. He is neither a Harriman, making of his wealth a means to power, nor a Junior Rockefeller administering his fortune as a public trust, nor yet an Astor withdrawn from the sphere of active influence. He is something else, something more nearly comparable to a landed proprietor of nineteenth century English life, a man who has inherited a great property, who feels the responsibility of his inheritance, who intelligently increases it, but who does not make his holdings his career. Arthur Curtiss James is one of the first and perhaps the best example of the great funded proprietors Industrial Civilization must produce. He is an owner of railroads. But not as Hill was an owner of railroads, though the holdings are in part the same. Arthur Curtiss James is an owner of railroads because he had money to invest and because money was being invested in that day in railroads. Being a railroad owner he has properly concerned himself with what he owned. The possible merger of the Great Northern and the Northern Pacific which, with parallel lines, tie the Great Lakes to the Pacific, interested him. These two roads with the Chicago, Burlington & Quincy would make a system 26,500 miles long across the Northwest. He is also the largest single stockholder in the Southern Pacific, spanning the Southwest from New Orleans to Los Angeles, throwing a long arm northward to Oregon. It occurred to him that another north-south line along the Pacific would be valuable. "Having come to this conclusion," he told the I.C.C., "I bought control of the Western Pacific." He would like the Commission to permit him to link the Great Northern and the Western Pacific with a 200-mile road in California.



International

THE MOST DISTINGUISHED PARTICIPANT IN A NEWPORT FÊTE FOR CHARITY—ARTHUR CURTISS JAMES

Like a sensible estate owner he is not satisfied to guide these vast projects from his room in the Phelps, Dodge offices at 99 John Street, Manhattan. He goes over the property. But the tour of the property in his case takes him up and down the West. He purchases or sells. At various times in the last three years he has been officially listed as owning 46,016 shares of Northern Pacific (in the name of Curtiss Southwestern Corp.), 46,150 shares of Great Northern, 50,000 Southern Pacific (Curtiss Southwestern Corp.), 75,000 first preferred Western Pacific and the huge total of 474,987 Western Pacific common. The recent market value of these holdings was almost exactly $30,000,000 and they do not begin to represent the extent of the James investments. In the name of Mrs. James are listed 765 shares of First National Bank of New York; this holding alone is worth $4,000,000.

In 1889, at the age of 22, Arthur Curtiss James graduated from Amherst and went to work as a mail clerk in Phelps, Dodge & Co. He thus allied himself with one of the two principal Presbyterian families of the time. In Chicago, the McCormicks were making reapers. In New York the Phelpses and the Dodges were managing a copper mining and manufacturing business which they still in large part own. That young James should enter business via Phelps, Dodge was not surprising. More than 100 years ago, Daniel James combined with Anson Phelps to start a metals business which promptly failed. In 1848, Daniel's son—Daniel Willis James—became a partner of a revivified Phelps, Dodge & Co. Daniel Willis and James J. Hill were friends; Daniel Willis went on the board of the Northern Pacific. Through Phelps, Dodge he went on the boards of Ansonia Brass & Copper Co., Copper Queen Consolidated Mining Co. Young Arthur Curtiss fell into an atmosphere of copper and railroads, of expansion and Presbyterianism.

Daniel Willis died in 1907. To charity, he left $1,000,000; to his son, about $25,000,000. Presently, Arthur Curtiss James became member of the board and vice president of Phelps, Dodge. Presently, he took up the Hill tradition and many of the Hill securities. He went into the West; there he has flourished. His fortune has grown with the growth of the West; he has reaped the harvest of Hill's sowing.

Many of the new American fortunes (Cutten,

Armour, Fisher, Chrysler,—have come out of the rich Middle West. With this enormous manufacturing section, Mr. James has no contact at all. His estate lies west of the automobile mills, west of the stockyards, west of the cornfields. And his private life is profoundly rooted in the East. When he is not in his Park Avenue house (still only 300 feet from the supposed center of Manhattan's most fashionable district), when he is not sailing the *Aloha* around the world, he is most likely to be in a big Victorian house (bay windows, a flagpole) on top of a Newport hill. Here he superintends the operation of his model farm, a re-creation of a picturesque Swiss village with the important addition of such modern improvements as automatic milkers. From time to time he walks with a black police dog in the "Blue Garden" where every flower is blue. If the day is pleasant, he plays a set of indifferent tennis with his good friend Admiral Sims. This year he will find time to watch the trials to select the defender of the American Cup against Sir Thomas Lipton. Both here and in New York he is often found seated at the organ, which he plays well. He is particularly fond of Wagner; his musical taste is both cultivated and catholic.

In the evening he may read or he may discover himself host at a large dinner party. His wife, a woman both beautiful and imposing (only Mr. James would dare call her "Bunny," their joint term of endearment), is one of New York's most celebrated hostesses. To her dinner tables come hundreds of distinguished guests; upon her dinner tables repose hundreds of orchids, her favorite flowers. When the women leave the table, they are invited to make their own corsages from the abundance before them. Upstairs at 39 East 69th St. is a sun-room filled with plants and flowers; by night their perfume steals to the surrounding bedrooms. The house is always fragrant, always superbly groomed, always a going concern. During the war it was busy with Red Cross activities, as both Mr. and Mrs. James were eager in war work. One war story concerns them both. When the German submarine U-53 made a dramatic appearance at Newport Harbor in 1916, the Jameses and some friends went on board. After they had been shown over the boat, the German officers offered cookies to children in the party. Mr. James asked for a cookie and examined it closely. Later he explained that he had been seeking the maker's mark, to discover if the Germans had a supply base along the coast. That night the submarine sank three merchantmen and some of the survivors sought refuge at the James home. Later, the *Aloha* served the U.S. as flagship for an admiral.

The James benefactions are great, ubiquitous and inconspicuous. Italy's Victor Emanuel has decorated him for his gifts to the Italian School of the Children's Aid Society. His great and Presbyterian friend, Henry Sloane Coffin, is grateful for his interest in Union Theological Seminary. And a little-known enthusiasm of Mrs. James is the Christodora (Gift of Christ) House at Avenue B and Ninth street. Of this non-sectarian center, where young (preferably college) men and women of New York may study and live and where the East Side poor may come for settlement help and recreation, she has been the head for 25 years. She always comes to meetings of the Board of Managers; in 1927 she and her husband rendered further services by erecting a new sixteen-story frame for Christodora House with finest furnishings and decorations. Mr. James is a trustee of Amherst, of the Children's Aid Society, of Hampton Normal and Industrial Institute.

Edwin Levick

THE *ALOHA*, THE UNFORGETTABLE

However distinguished he may become as a philanthropist (this, too, is an inheritance; Daniel Willis James gave away at least $3,000,000 in his lifetime), Mr. James will never be more philanthropist than sportsman. Sailing is his great love. In 1909 he succeeded Cornelius Vanderbilt as Commodore of the New York Yacht Club; the next year he built the 659-ton, bark-rigged *Aloha*. Greater pleasure has never come to him than when it sailed, in 1913, from Sandy Hook to Gibraltar in 16 days and 22 hours. Twice he has sailed the *Aloha* around the world. On September 15, 1921, the sirens of East River ferry boats heralded her first departure. For the next eight months, Commodore James was in his element, doing his daily dozen in pajamas on the deck, turtle hunting off the coast of South America, hearing a visitor (Miss Arabella Plimpton) recall "what was said in Northampton when Hetty Parsons married that wild young Arthur James". Then he would show how wrong Northampton had been by visiting churches and universities, by dining genially with the foreign great. But above all he loved the ship which carried him proudly over the seas. When he came back, he exclaimed: "The dream of a lifetime has been accomplished. Ever since as a boy my imagination was fired . . ."

Next summer the *Aloha* again will carry him back and forth between New York and Newport. Perhaps the trips will be less frequent than usual, for the opening of 1930 seems freighted with importance for railroad men. Whatever may be the result of the I.C.C.'s consolidation proposals, Mr. James, as America's greatest railroad stockholder, will have a busy year. He will negotiate, build, expand. Yet at the end he will remain to the public the same shrouded figure he has always been—the least understood rich man in America.

Airmap Corp. of America

A SWISS VILLAGE IMPROVED WITH AUTOMATIC MILKERS ADORNS THE NEWPORT HOME OF MR. JAMES

The Biltmore's Profit

Comes to circa $650,000—It might be more if Mrs. Dean were less meticulous.

THE Hotel Biltmore is one of six or eight hotels in all New York which are definitely first class.

This means that if one of its coffee cups is nicked, ever so slightly, it is promptly abandoned to the junkman. Hence last year it bought new china and glassware to the extent of more than a hundred thousand dollars.

This means that if a sheet becomes frayed, ever so little, the frayed corner will not be tucked under the foot of the bed. Therefore, the Biltmore spent eighty-five thousand dollars on *new* linen last year.

Both these items are classed as current expenses, for they recur in approximately the same amounts every year. If this year the Biltmore were willing to let its standard slip, it might well show a profit of $1,000,000. But in doing so, it would lose that priceless jewel, reputation.

Instead, its profit for 1928 (and no doubt 1929 will prove to be much the same) was something over $650,000, or just about 11% of its gross receipts of $6,000,000.

Whence came the six millions? Whence the profit? Look at the rows of figures on the opposite page and you will see. These figures contain in as complete detail as space permits, the essentials of high-grade innkeeping in the Twentieth Century. For them, the reader is indebted to the courtesy of that great modern innkeeper, Mr. John McEntee Bowman, and of his assistant, Mr. Robert S. Maffitt, Comptroller and director of the Bowman-Biltmore Hotels Corporation. These figures will not reveal any secrets to Biltmore rivals. For they are given in round numbers and some detail may be off by 10% or perhaps even 20%. But every hotelman will recognize it as a *true* picture; and a layman who apprehends this picture may feel that he knows (not vaguely but specifically) what it means to give bed and board to 1,000 exacting individuals every day at the centre of the world's most exacting city. And board to yet more individuals.

Biltmore photographs by Arthur Gerlach

LAST YEAR THE BILTMORE SERVED MORE THAN 1,000,000 MEALS

In one curious respect the Biltmore figures differ from similar hotels of its rank—viz., in the $5,000 which FORTUNE estimates as its profits from telephone service. Most hotels charge 10c for a local call which costs them less than 4c. But by the time they have paid for their girls, they are more apt to show a loss than a profit. However, the Biltmore is famous as a rendezvous and place from which smart shopping matrons may phone. Hence (including long-distance) the gross receipts from telephone is $300,000, which is probably more than double the Plaza's or the Ritz's. From such volume it is possible to pay the girls, reimburse the telephone company, and extract a tiny profit.

In the basic items the Biltmore runs true to the best rules. It is not the most expensive of hotels, but it is expensive. It is not the biggest, but it is very big—1,000 rooms and all manner of restaurants and other appurtenances.

FORTUNE has set up the accompanying figures to show *departmental* profit. The gross receipts, as we have said, are $6,000,000. After deduction of direct departmental expenses, the departmental profits are $2,575,000. But out of the total departmental profits must come all those expenses which cannot feasibly be split up among the various departments. These expenses amount to about $1,925,000, leaving about $650,000 as the Biltmore profit.

The biggest non-departmental expense is the rent of the building and of the land on which it is built and of the taxes and insurance thereon. This comes to $900,000, or nearly half the non-departmental expenses. Now, if one loves to fuss with figures, one might say that the rent could be split up between the rooms, restaurants, and

A PLAYROOM, A CHAPEL, A FOUNDRY, A TAILOR SHOP . . .

A WEEK'S WASH WOULD MAKE A TENT FOR MANHATTAN

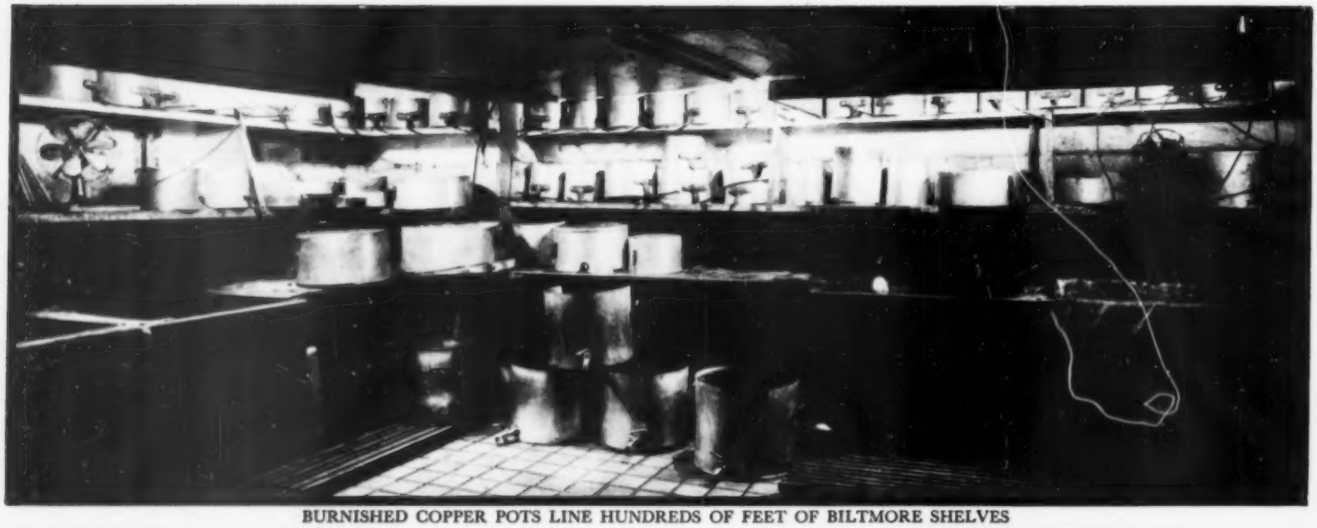
Biltmore Operations Estimated

Departmental Receipts Less Expenses

ROOMS (from $4 each to $100 suite)		$2,100,000
Less: Maids and other wages	$300,000	
Laundry	30,000	
Uniforms, etc.	10,000	
Linen	40,000	
Cleaning	40,000	
Soap	3,500	
Miscellaneous	51,500	
	$475,000	
Departmental Profit	1,625,000	
FOOD		
From Restaurants	$1,750,000	
From room service	400,000	
From banquet	500,000	
Total Sales of Food		2,650,000
Less: Cost of food	$1,000,000	
Waiters', cooks', & other wages	650,000	
Menus	10,000	
Laundry	45,000	
Uniforms	15,000	
Decorations	60,000	
Kitchen fuel & expenses	50,000	
Music	170,000	
China & glassware	90,000	
Linen	45,000	
Silverware	15,000	
Miscellaneous	50,000	
	$2,200,000	
Departmental Profit	450,000	
BEVERAGES		130,000
Less: Cost of Beverages	$40,000	
Wages	10,000	
Glass, etc.	5,000	
	$55,000	
Departmental Profit	75,000	
TOBACCO		135,000
Less: Cost of Cigars & Cigarettes	$100,000	
Wages	9,000	
Miscellaneous	1,000	
	$110,000	
Departmental Profit	25,000	
CANDY & FOUNTAIN LUNCH		135,000
Less: Cost of Goods	$75,000	
Wages	30,000	
Miscellaneous	10,000	
	$115,000	
Departmental Profit	20,000	
VALET		55,000
Less: Wages	$20,000	
Miscellaneous	5,000	
	$25,000	
Departmental Profit	30,000	
TURKISH BATH		$70,000
Less: Chiefly labor	$40,000	
Departmental Profit	30,000	
GUEST AND HOUSE LAUNDRY		130,000
Less: Wages	$100,000	
Damaged articles	250	
Laundry tickets	250	
Soap	1,250	
Other Supplies	8,250	
	$110,000	
Departmental Profit	20,000	
RENTS & PRIVILEGES (various shops including Florist)		295,000
TELEPHONE		300,000
Less: Cost of Service	200,000	
Wages	60,000	
Rental of Equipment	20,000	
Miscellaneous	15,000	
	$295,000	
Departmental Profit	5,000	
GROSS SALES		$6,000,000

Recapitulation of Departmental Profits

Rooms	$1,625,000	
Food	450,000	
Beverages	75,000	
Tobacco	25,000	
Candy & Fountain Lunch	20,000	
Valet	30,000	
Turkish Baths	30,000	
Guest and House Laundry	20,000	
Rents & Privileges	295,000	
Telephone	5,000	$2,575,000
Less:		
Non-departmental Expenses:		
Repairs & Renewals	$ 345,000	
Rent, Taxes and Insurance	900,000	
Management	100,000	
Accountants & Auditors	100,000	
Heat, Light & Power	300,000	
Advertising	50,000	
Miscellaneous	115,000	
Bad Debts	15,000	$1,925,000
NET OPERATING PROFIT		$650,000



BURNISHED COPPER POTS LINE HUNDREDS OF FEET OF BILTMORE SHELVES

FEW GUESTS MEET MIKE THE TINSMITH

other sections. Just a moment's reflection will show how fruitless this is. The first floor is the most valuable. Much of it is lobby. In order to divide up the cost of lobby one would have to put spies in it for a year to determine how many steps in the lobby were taken by guests who bought food and not rooms, by those who bought both, and by those who bought nothing but a phone call or kept a date under the well-known clock. The result would be barrels of theory and practically no fact to convert to profit.

The approximate departmental profit from rooms shown in the accompanying chart is 75 per cent, which the management knows by experience it should get from the rooms, and which it also knows it cannot get. It realizes that most of the rent, light and heat is chargeable to rooms; so it guides itself accordingly.

The Biltmore's food situation also runs true to type. Something more than $2,600,000, it received from the 1,000,000 meals it served last year. The actual food cost about $1,000,000. Another $1,000,000 and more went for waiters, cooks, cooking fuel, icemen, crockery, music, glass, etc., leaving a departmental profit of about $450,000. Management might be just as alarmed if profit went to $700,000 as if it came down to $300,000, for in the first case it might mean that nicks had been tolerated in coffee cups or inferior oil in the salad.

Without further ado beyond this explanation, the reader is referred to the chart, there to discover what he will:

the coincidence that people spend almost exactly the same amount for beverages as for tobacco, but that while beverages yield $75,000 departmental profit, tobacco with a much thinner profit-margin, yields only $25,000;

the amazing efficiency revealed in the fact that guests collect only $250 for damages out of a total laundry bill of $130,000;

that the salary of the manager and his immediate staff amounts to an almost imperceptible fraction (characteristic of big business);

that the soap used is about $10,000 ($1,250 for guests' to laundry; $3,500 for guests' persons; $3,500 for the hotel's own laundry).

Discipline:

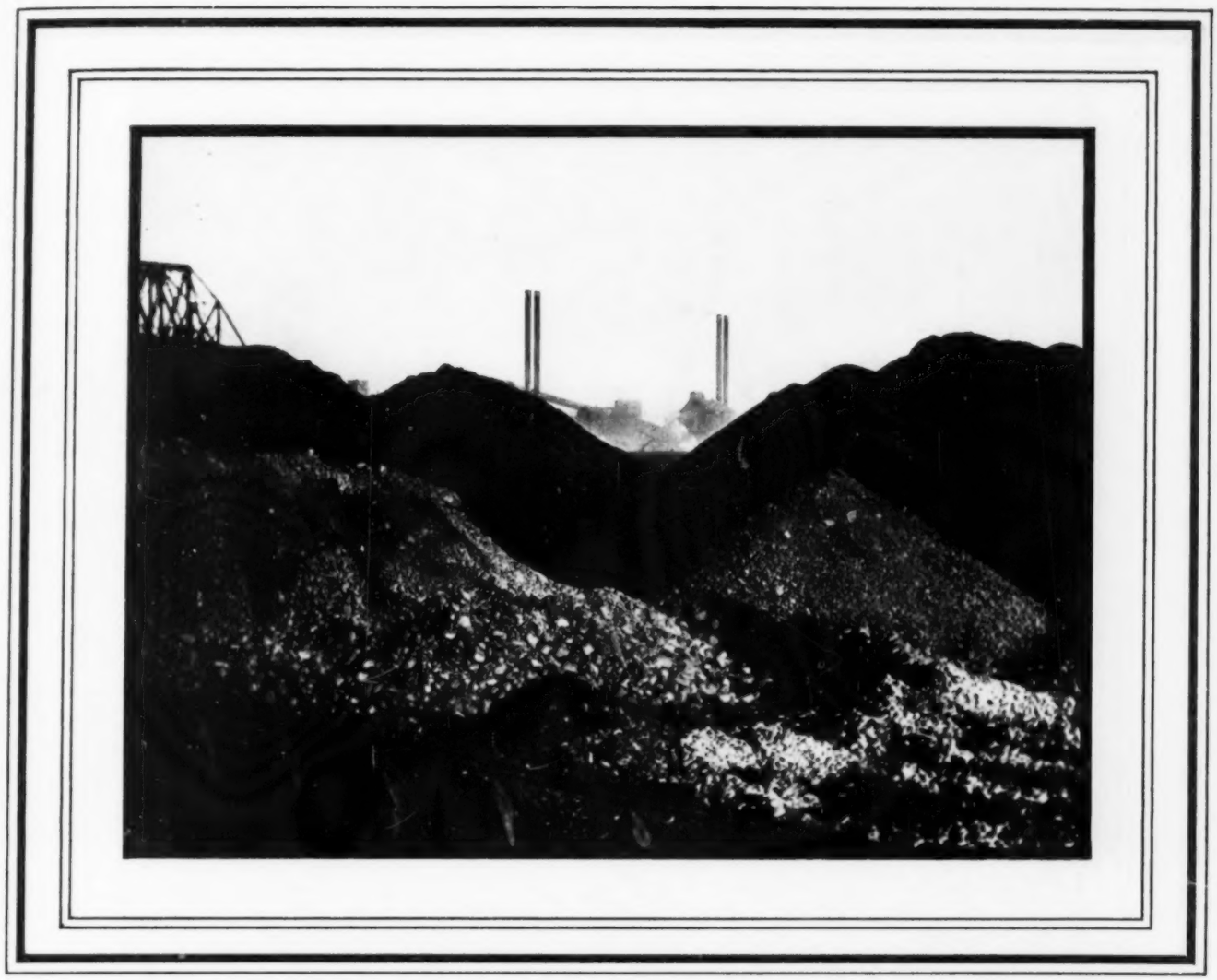
Leaving the financial considerations, let us look at some details of operation. All the details are summed up in the word: *Discipline*. Mine Host must be a Beau Brummel, but also he must have the capacity to get and maintain discipline which your ablest General or Admiral might admire. This discipline is reflected in the precision

THE HOTEL IS ALSO AN UPHOLSTERER

of the records covering every minute detail.

So accurate is the hotel's check that nothing, be it a conspicuous guest or one oyster in a cocktail, enters or leaves the building unobserved. Given a few minutes' notice, Mr. Hiram H. Schuyler, the Biltmore manager, could tell you that on January 20th, the guest in room 1170 arose at 8:11 o'clock and asked for breakfast; that breakfast costing $1.15 was delivered at 8:22 by Waiter Jones; that at 9:13 the guest went out for the day leaving exactly two suitcases, a portable typewriter, and a suit to be cleaned. There would be a record of the time when the valet called for the suit and when he brought it back. When the guest returned after dinner it was duly entered in a floor clerk's book; when he complained that the light on his night table was burned out it was recorded in a book along with the time of the complaint, the time of completed repair, the nature of the trouble, the name of the repairman. When the guest, two weeks later, wired from Seattle that his cuff-links were missing, the Biltmore was able to show that they had not been left in the hotel, but had been lost under a berth on the Overland Limited between

[*Continued on page 156*]

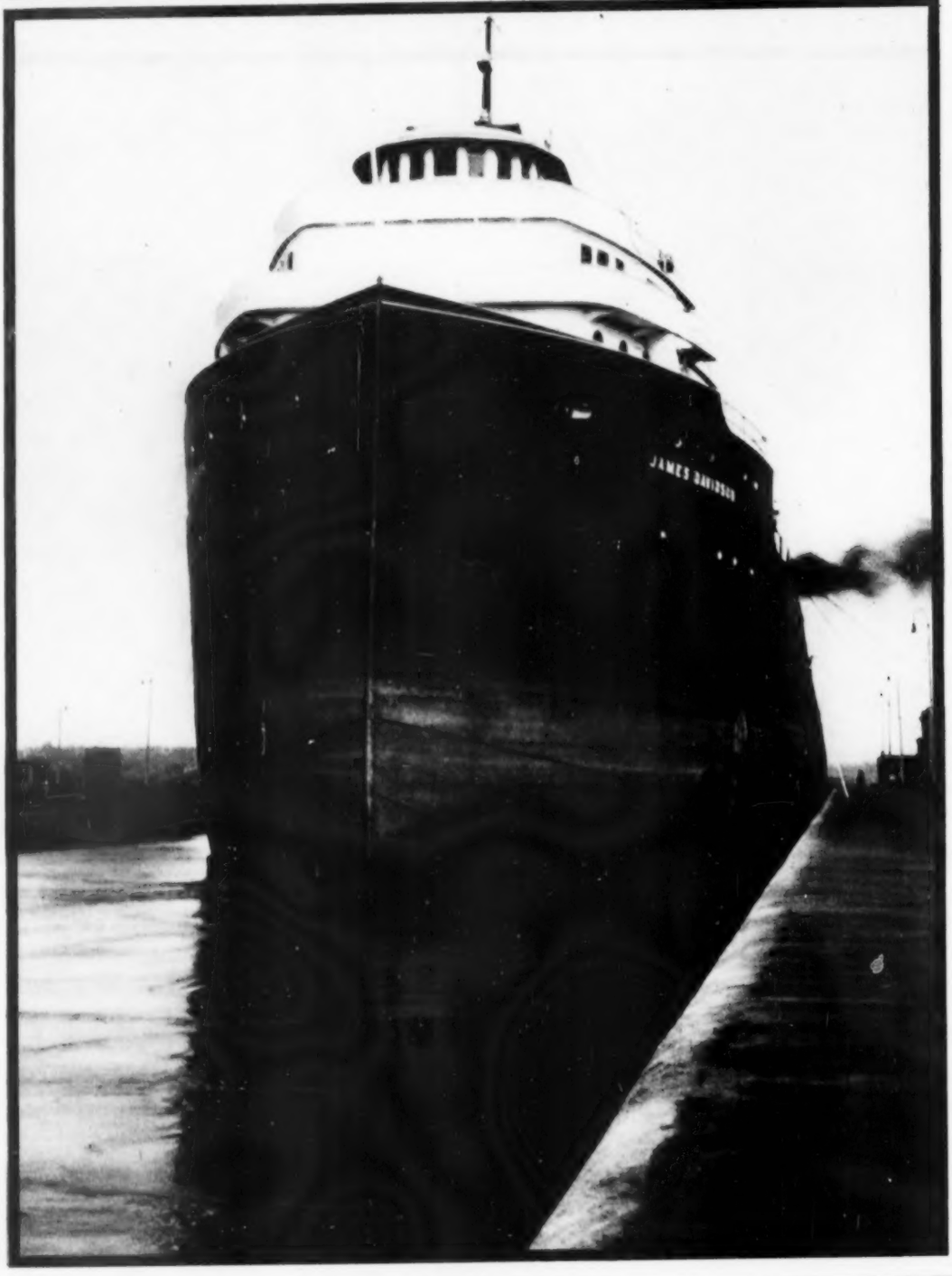


HEAPED ORE, READY FOR THE FURNACES OF CLEVELAND STEEL MILLS

Trade Routes Across the Great Lakes

A Portfolio of Photographs of Iron, Steel, Coal and Ships

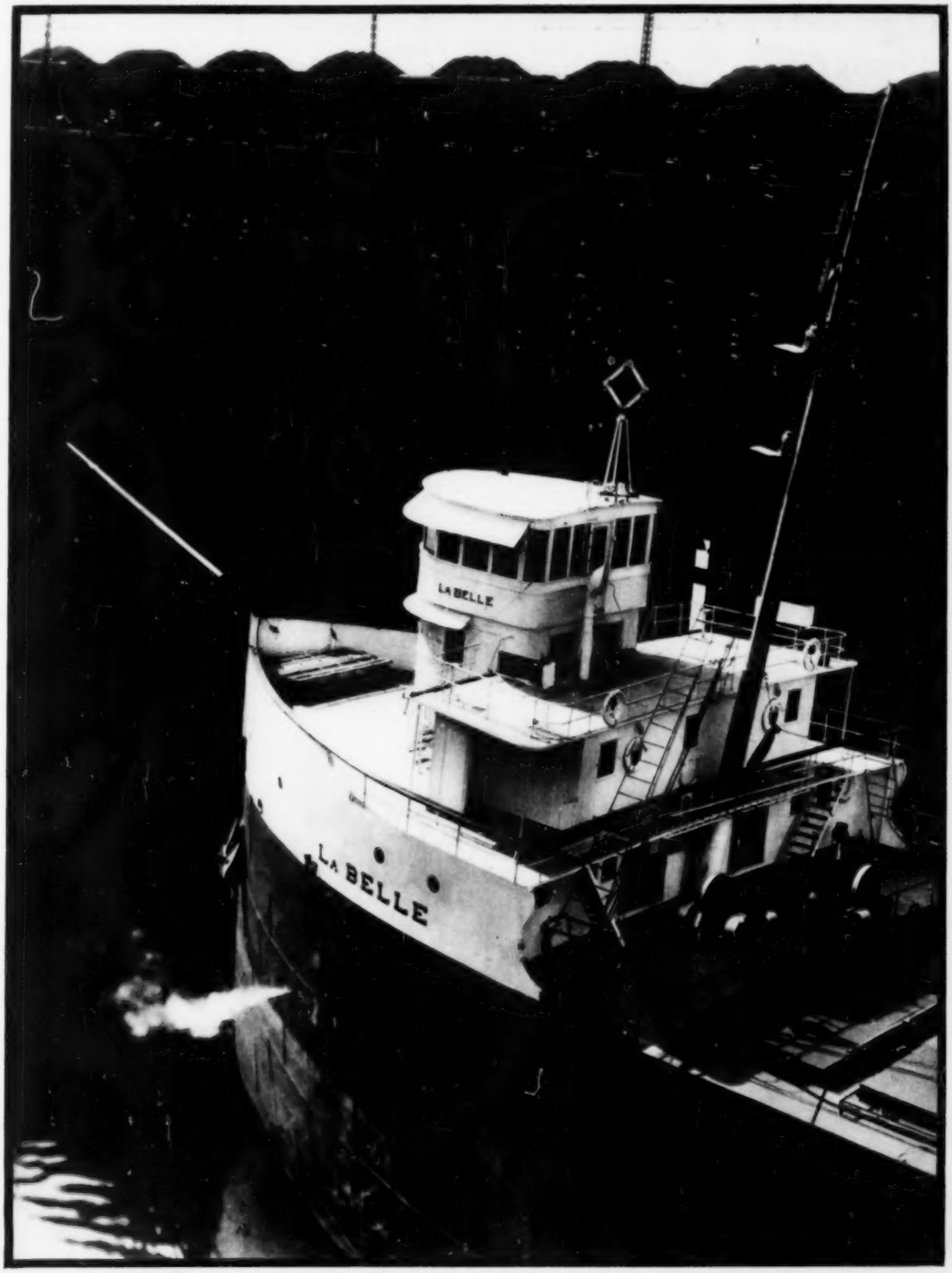
By Margaret Bourke-White



THE FREIGHTER *JAMES DAVIDSON* GOES UP THE LAKES, TRAVELING LIGHT

ELECTRIC WELDING (8000° FAHRENHEIT) AT THE LINCOLN ELECTRIC CO.

UNLOADING COAL FROM A FREIGHTER AT THE BERWIND DOCKS, DULUTH



THE *LA BELLE* ARRIVES AT THE GREAT NORTHERN DOCKS (DULUTH) TO TAKE ON A CARGO OF ORE

Radio Corporation of America

An ironic decade.

IT IS the genius of comedy to take a situation and deftly turn it inside out. Even now the curtain is just ringing down on the first act of a high comedy of industry with a magnificent upset of everyone's calculations.

A brief obscure prologue preceded the main act. The time is 1915, the place a room in the old Holland House, New York, occupied by Senator Guglielmo Marconi. At his request, a young vice-president of the General Electric Co. named Owen Young has come for a talk on radio communication. The Senator is telling Mr. Young that he is ready to place with the General Electric Co. a $5,000,000 order for preferential rights to its new high frequency alternator developed by Dr. Ernst F. W. Alexanderson—on which, it seems, the whole future success of radio communications is dependent. Mr. Young conceals his astonishment and withdraws resolving to investigate the commercial possibilities of such alternators.

The main act began in stirring circumstances, with Woodrow Wilson sitting in the Hall of Mirrors at Versailles. It was now 1919 and the great American President, with eyeglasses perched on his Louis XIV nose, was surrounded by the powers of the world. All his eloquence was bent on making them subordinate the narrow claims of nationalism to the claims of humanity, of internationalism, and of the League of Nations. But even as he sat there the small voice of patriotism called to him, and the spirit of nationalism, not dead, reawoke in his bosom. So he returned one evening to his residence in the home of Prince Murat, where Mrs. Wilson waited for him, and instructed Rear Admiral William H. G. Bullard to proceed immediately from the peace conference at Paris to the United States with a message for this same Owen Young.

Berenice Abbott

DAVID SARNOFF—PUCK OF RADIO

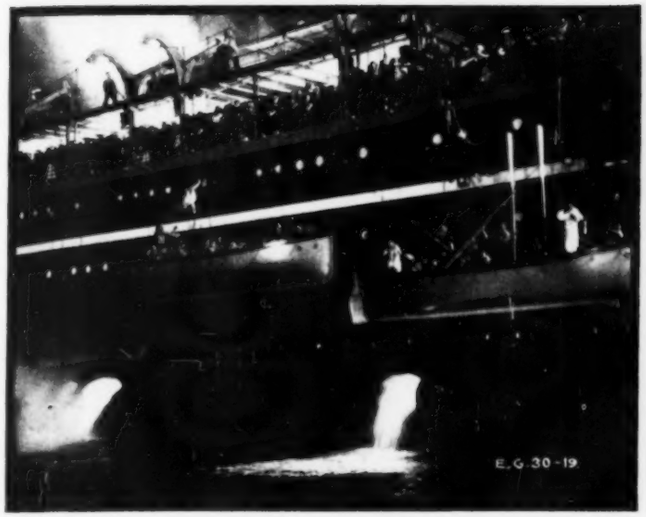
The situation was this. For years the British had been masters of world communication. Not only did they own most of the transoceanic cables but they had almost a monopoly on gutta percha with which cables are insulated. What was more, they had been first in the field of radio. Marconi's Wireless Telegraph Co., Ltd. and its subsidiary, Marconi Wireless Co. of America, possessed a well-rounded collection of patents. But among American companies patents were so scattered that it was almost impossible to assemble a sufficient quota to make an efficient sending and receiving radio set. In consequence of the British control of communications, an American firm wishing to bid on a foreign contract, or to give orders to a sea captain abroad was practically obliged to send its messages through British hands—cable or radio—with the possibility of delay or unfair use advantageous to British competitors.

Woodrow Wilson in Paris saw an opportunity to loosen the British grip by obtaining a share of the radio business before it, too, had been lost forever. He knew that the Marconi company, after the interruption of the war, was pressing General Electric for a resumption of the bargain over the Alexanderson alternator which grew out of the Holland House meeting four years before. Practically speaking the General Electric Company had but one market for its machine: to sell to the Marconi company would have been ordinary good business.

Immediately upon his arrival in the United States, Rear Admiral Bullard, as Director of Naval Communications, met the officers of General Electric and told them that they would do an irreparable damage to American business if they sold the alternator to the British. It was all very much like an American version of Parker's play *Disraeli*, or how the Suez canal was saved for England.

The General Electric officials, to whom Rear Admiral Bullard appealed, were patriots and business men, too. They asked what they were to do with the alternator. They had no other immediate market for it. Its development had cost them $1,500,000. It was not a bauble to be left lying around the laboratory. The British negotiations promised a fair return on their investment. The answer of Rear Admiral Bullard was that an American radio company should be formed—capable of meeting the English on equal terms. After consideration,

[*Continued on page 84*]



The Atlantic (Titanic) Sinks

BEFORE midnight on April 14, 1912, the S.S. *Titanic*, racing westward on her maiden voyage at full speed (despite warnings that ice was nearby) crashed into an iceberg off the Great Banks. At first few passengers understood; many danced on. To suppress panic, the ship's officers spread a false sense of security.

At 2:20 on the morning of April 15, with little immediate warning, the great ship nosed under the calm and icy Atlantic waters, carrying 1,513 people to death. Her band, in life preservers, played lively tunes, and finally, "Nearer My God to Thee." At daybreak arrived the first rescue ship, the *Carpathia*, whose skipper, Rostrom, now captains the *Berengaria*. She gathered up some 711 men and women in lifeboats.

A wireless operator named David Sarnoff was in his high-powered station atop the John Wanamaker store in New York when Jack Phillips, 24-year-old wireless operator on the *Titantic*, flashed out his first call: "Come at once. It's C(ome) Q(uick) D(anger)." Later President Taft ordered all other stations silent, to allow uninterrupted communication between Operator Sarnoff and that far-off catastrophe. With ear phones clamped tight over his head, his very soul projected into the black heart of that marine disaster, he could not hear Phillips' plaintive messages to the *Carpathia:* "Please hurry . . . She's taking water . . . It's up to the boilers . . . We are sinking bow first . . . Send help." The old C.Q.D. call was alternated with the then new distress signal S.O.S. Gradually the *Titanic* messages died away as her power plant failed. Great confusion in the air followed. Via the *Olympic*, the *Carpathia* relayed in its list of *Titanic* survivors to Operator Sarnoff who held his post for three days and three nights —72 hours. Wireless then was not the crisp precise thing it is today: Sarnoff's ears ached with the strain of catching the blurred crackly code.

It was in this period of wild uncertainty that Carl Van Anda, managing editor of the New York *Times*, acquired journalistic renown by organizing his entire staff in preparation for a huge disaster story on the first vague rumor, while his competitors were discounting the reports about the *Titanic*. The detailed story of her sinking came five days later, with the arrival in New York of the silent *Carpathia*.

The *Titanic's* sinking—and Sarnoff's part in it—established for all time the primacy of radio as an essential device for sea safety. Soon thereafter Congress ordered all sea-going ships carrying fifty or more passengers to equip themselves with wireless sets.

Here are presented stills from the new moving picture, "Atlantic," produced by the British International Co., most prolific of the struggling English cinema concerns. Except for a piffling and irrelevant love story, the British film attempts to give an intelligent paraphrase of the greatest of peacetime sea disasters. In it the band plays from the tilting deck. Crowds surge wildly under the shadow of sudden death. The captain releases his crew—"Every man for himself." From the flooding engine rooms the "black gang" struggles vainly up the narrow ladder to the deck and possible rescue.

The producers show Phillips staying in his wireless coop till water rises above him. Phillips, however, left when his power failed, clung for a time to a lifeboat. But his end was the same.

© H. & E., Wide World

A DREAM OF HIS . . .

Paramount Pictures

. . . MADE POSSIBLE THE RISING OF THESE STARS

Vice-President Young of the General Electric said that he thought it could be done.

And done it was. General Electric officials met with important holders of other American radio patents—American Telephone & Telegraph Co., United Fruit Co. (which had developed a good radio system in connection with its Caribbean service) and later with the Westinghouse Electric & Manufacturing Co. Together they determined on a pool of their patents as the necessary foundation for an American radio company strong enough financially and technically to compete with the British. Possession of the all-powerful Alexanderson alternator, then the "heart" of the great New Brunswick, N. J. wireless station, together with the recently acquired British interest in the Marconi Wireless Telegraph Co. of America, gave General Electric the dominant right to sire this new company.

Thus was born the Radio Corporation of America. Its working capital was represented by preferred stock issued for cash to the participating companies, which received common stock in exchange for their radio patents. Government officials took an active interest in the new company, approved its charter provisions preventing foreigners from ever voting more than 20% of its stock, and sent Rear Admiral Bullard to sit with the Directors as the representative of the Government. President Wilson was well pleased that his idea and the patriotic efforts of his fellow citizens had borne such practical fruit.

So ended the first scene of the act—a British Goliath now faced with a redoubtable American David.

A brief *entr'acte* indicated the importance of the youthful Radio Corporation in the field of world communications. The time is 1921; the scene, Paris. Thither Mr. Young summons the heads of the Marconi's Wireless Telegraph Co., Ltd., the Compagnie Générale de Telegraphie sans Fil of France and the Gesellschaft für Drahtlose Telegraphie m. b. H. of Germany. It is the first post-war conference at which French and Germans meet as equals. The German radio executives glare at the French wireless men and the Frenchmen glare back at them, neither speaking to the other until a sharp difference of opinion precipitates a dispute between them, breaking the hostile silence. South America offers enough radio business for only one company; four companies of four nations in the same field mean heavy losses for all. Mr. Young suggests the solution: formation of a new company—the A. E. F. G. Consortium—for South American communications, in which each nation will own a quarter share and be represented by two directors. A ninth director is to be impartial chairman. The suggestion is adopted. The United States, thanks to Mr. Young's initiative, is permitted to contribute the chairman, who is Thomas Nelson Perkins of Boston.

There, one might assume, is the complete background of the Radio Corporation—its patriotic origin, its quick development to a world-influence in the field of wireless communications, its long substantial shadow falling unmistakably into the future. Yet it is nothing of the kind. The genius of electricity was the motivating force behind this international comedy and the genius of electricity is notoriously unpredictable. Almost at once it began to move its creatures about on the public stage until it found itself going in every direction with almost bewildering speed. A hundred surprises crop out as the impish spirit of electricity twists the Radio Corporation's serious destiny into a fantastic *Midsummer Night's Dream.*

The first unexpected diversion came when the government-fostered Radio Corporation incurred the suspicion and sharp antagonism of its foster parent. The Federal Trade Commission began to investigate the loud complaint of the "independents" that the Radio Corporation was a danger to the radio industry of America because of unfair competitive methods. The charge against it was the very essence of its creation—the patents which had been pooled to bring it to life. With that as a starting point, the Federal Trade Commission subjected the Radio Corporation's fabric of organization to the most searching scrutiny.

This controversy of the Government with its fosterling ran at great expense through four and one-half years and eighteen thousand pages of dialogue and testimony. Only at the close of 1928 did the Federal Trade Commission dismiss its complaint, having failed to make even a prima facie case against the Company. Nevertheless the parent continues to eye the child narrowly.

Action as well as dialogue was provided in the comedy's next turn from its charted course. On November 2, 1920, more than a year after the founding of the corporation, the first radio broadcasting station, KDKA (Westinghouse) at Pittsburgh, was opened. There was double damage done that day: a new thing had been begun that was to make the chief interest of the Radio Corporation something quite other than what had been in Woodrow Wilson's mind that day in Paris, and the program which gave broadcasting its auspicious start was the election returns showing that the Harding landslide had buried the League of Nations, another creature of the Hall of Mirrors at Versailles.

If Woodrow Wilson's thoughts that evening had not been too pre-occupied, he might with a prophetic ear have heard the strange voice his patriotic foster child would develop in the coming decade. He might have marveled at its rhapsodizers, songsters, syncopators, at its politi-

[*Continued on page 128*]

Color in Industry

The Anglo-Saxon is released from chromatic inhibitions. With spectrophotoelectric curves he prepares to outdo the barbarians.

THE THIRST FOR COLOR AFFECTED THESE

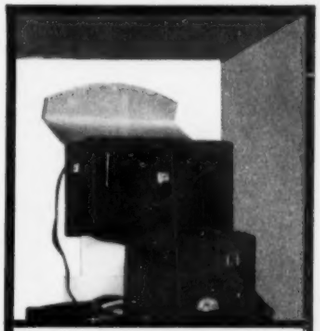
NOT ONLY DISHES, BUT POTS AND PANS ARE BEDECKED

CONSIDER, for a moment, a red bed. Red is a common color and a bed is a fundamental article of furniture. Yet the combination of the two had, until very recently, almost a startling effect. Grandmother, perhaps, would have thought a red bed immoral. Mother would have considered it at least peculiar. Nearly anyone in, say, 1920, would have expected to find only a Red in a red bed.

Yet, within the past five or six years, thousands of red beds have blossomed in corresponding thousands of American bedrooms. Also have arrived blue beds, green beds, yellow beds, purple beds, mauve beds, and blue, green, yellow, purple and mauve bedspreads to cover them. There is now nothing startling about color in the bedroom—although architecture remains drably monotone. For during the past few years a great pail has up-ended itself over the American scene, has splashed our household goods and gods with a rich, warm stream of flat, bright color.

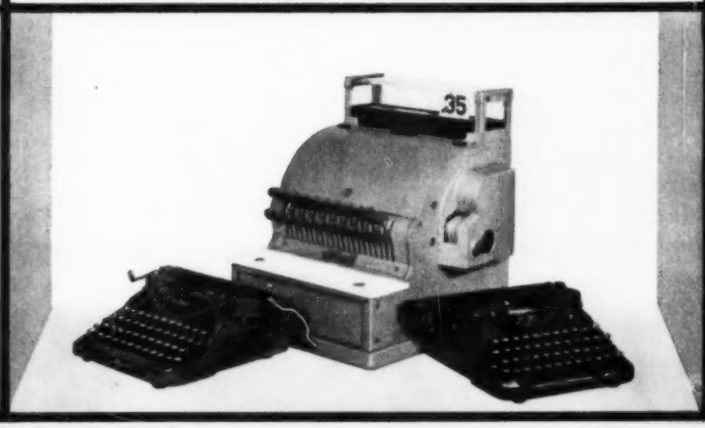
Remember, for contrast's sake, the home of 1920 and of 1925. Here there were chiefly natural colors. Kitchen and bathroom were a porcelain and surgical white. Furniture was in natural wood tints, surfaced with colorless finish. The stove was black. Faucets were metallic. Things were, so to speak, as God made them—each object deriving its color from the material of which it was fashioned. Even the family car was black, or some dull, dark color allied to blackness. In the nursery, perhaps, Junior possessed and treasured a blue horse. Only in the nursery, however, was such a contradiction of nature permissible.

Turn now to the thoroughly painted home of 1928. Here so utilitarian an object as a sink was purchased from a color range of T'äng Red, Orchid of Vincennes, Royal Copenhagen Blue, Ivoire de Medici, St. Porchaire Brown, Rose du Barry, Ionian Black, Clair de Lune Blue, Ming Green and Meissen White. In the cellar stood a Redflash Boiler, more crimson than the



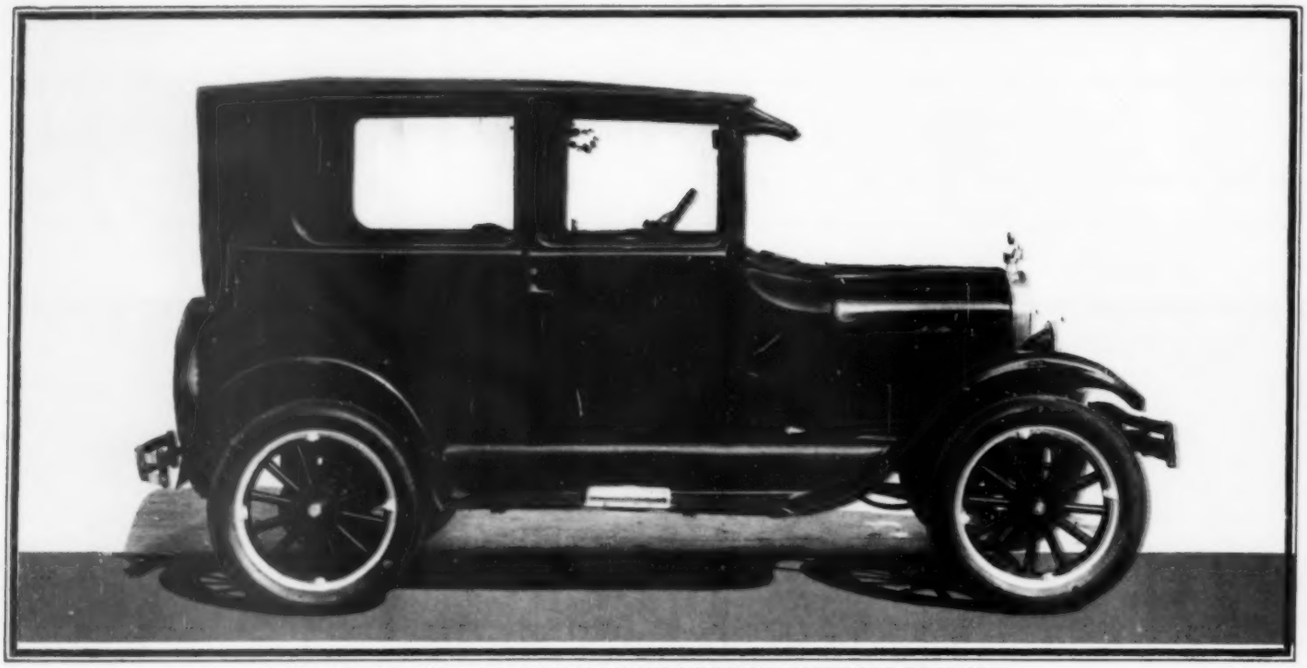
THE OLD BLACK CAMERA IS NOT WHAT IT USED TO BE

COLOR MAY MAKE CHEERFUL EVEN AN ALARM CLOCK



Courtesy Nat'l Cash Register Co., L. C. Smith & Corona Typewriters, Inc.

THIS PAGE, AND THE NINE PAGES FOLLOWING, BEAR BRILLIANT WITNESS TO THE ADVENT OF COLOR TO AMERICAN INDUSTRY. THE COLOR CAMERA HAS HERE RECORDED THE INDUSTRIAL SPECTRUM, RANGING FROM YELLOW ALARM CLOCKS TO BLUE LOCOMOTIVES



MR. FORD CLUNG TO BLACK, BUT CHEVROLET SALES CONTINUED TO MOUNT

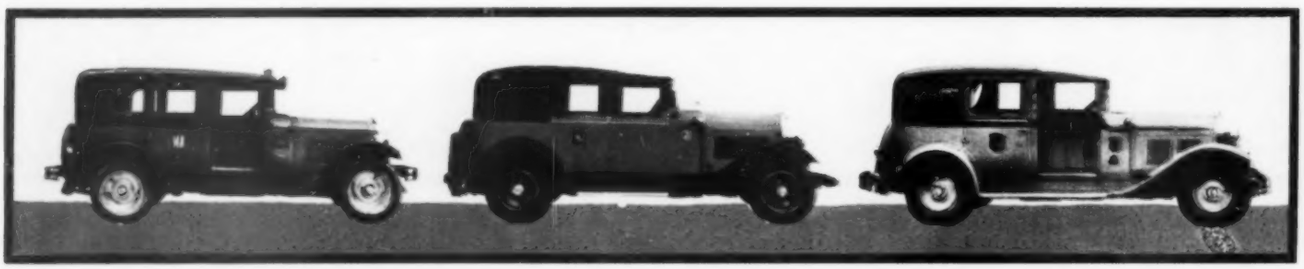
flames in the adjacent furnace. On the door of the orange refrigerator was perched a bright green parrot. Not only the dishes, but the pots and pans were decked in bright gay tints and tones. A green-tiled bathroom was set off with green tub, green towels and, monstrously enough, green toilet paper. For afternoon tea there were blue glasses and a yellow cloth. A yellow alarm clock—a cherry garbage can—a scarlet typewriter—surfaces had turned suddenly into palettes. Nor had such staples as chairs, desks and tables missed submergence in color's rising tide. As for automobiles—the autumn woods showed no more varied or more brilliant plumage.

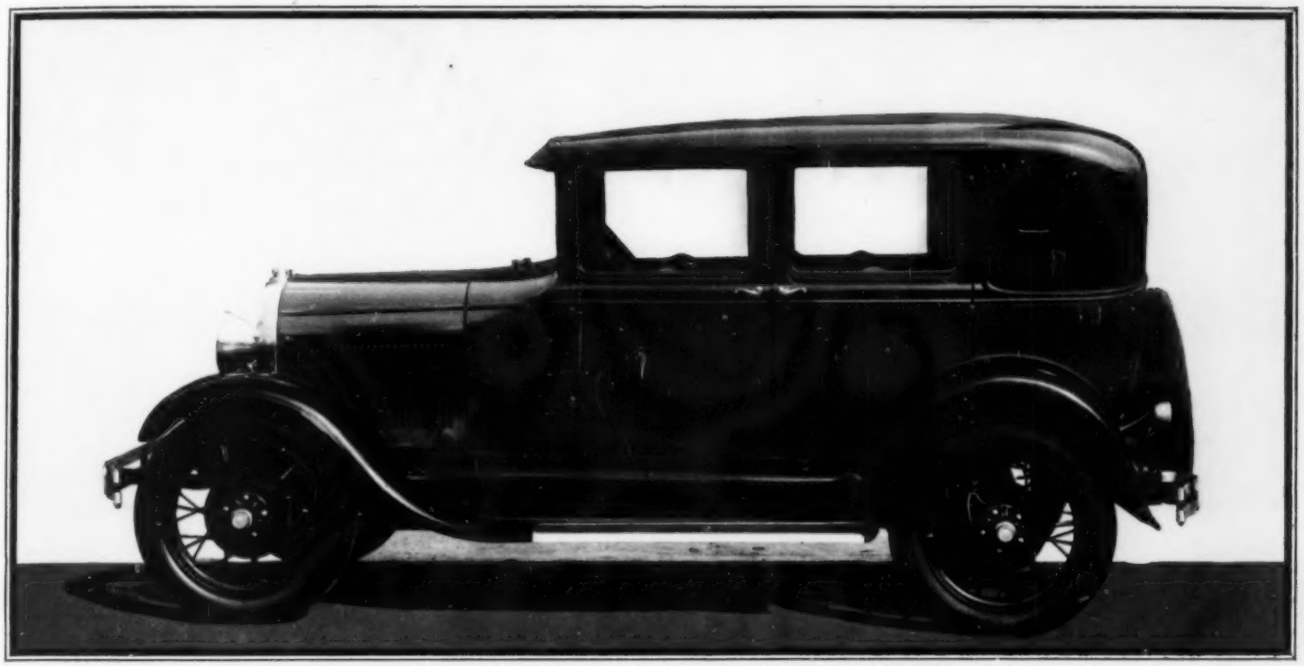
The aesthetic value of all this decoration was, in many instances, open to question and, in its more extreme vagaries, color suffered from the fevered and fleeting qualities of a fad. Yet in a country so long committed to the proposition that where there is beauty there is decadence, the acceptance of color was undoubtedly significant from the standpoint of old traditions being abandoned and old suppressions being released. Turning from color in the home to color outside the home—from color domestic to color industrial—it is easy to see how in the past, and even in the present, industry has used color chiefly for some utilitarian purpose. Identification, attention, and standardization—these have been the trinity of causes on which the use of color has been based.

As long ago as the days of the Civil War, when the first Atlantic & Pacific grocery store was opened in New York, a shrieking red set it off from neighboring emporiums. Perhaps it is from this precedent that chain store units have so generally adopted a distinctive decorative effect—certainly all the Great Atlantic & Pacific Tea Company's stores are still as red as their first parent; red, too, are the stores of Woolworth and of Kresge. A more unusual instance of color identification is the blue coal of the Delaware, Lackawanna & Western Coal Co. Gasoline and motor oil makers have produced the yellow of Texaco, the red of Socony Special, the blue of Sun Oil Co., this last effort having partially failed of its purpose when Pure Oil also marketed a blue gasoline. In full page newspaper advertisements Sun Oil complained: "Is it not a fair assumption that no other refiner would follow our lead and market a *blue* gasoline except with intent to deceive?"

Violet, ivory & gold

Allied to the use of color as a means of identification is the use of color as a means of securing attention. Conspicuous, for example, are the planes of Colonial Airways Corp.—their bright blue bodies and bright orange wings standing sharply clear against the blue and grey of the sky or the brown and green of the earth. In a similar manner many of the railroads have designed special colors for their crack expresses. It is a

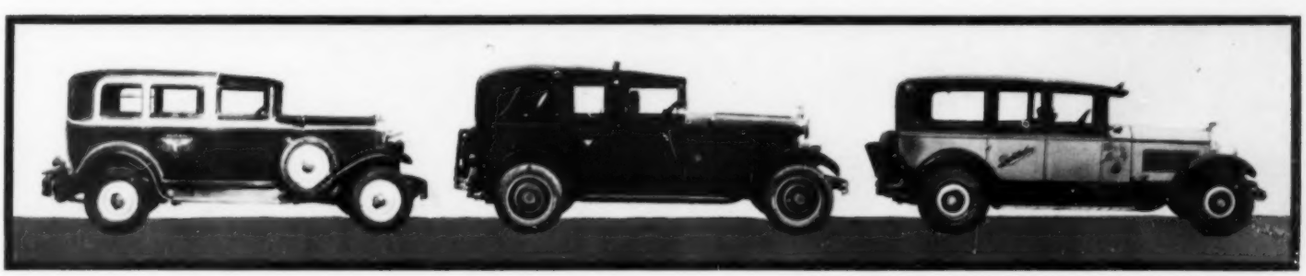




UNTIL WITH THE NEW MODEL A, MR. FORD MADE A COMPLETE SURRENDER TO COLOR

long time since the old New England Railroad ran its gleaming white *Ghost Train* between Boston and New York. Today, however, America matches the PLM's *Train Bleu* (Paris to the Riviera) with the *Blue Comet* which makes its profitable daily run from New York to Atlantic City for the Central R. R. of New Jersey. We have also the Chicago Great Western's *Red Bird* (Minneapolis and Rochester, Minn.), the green, gold-striped locomotives of the Southern Railway, and the red-and-maroon engines which pull the Chicago & Alton's *Alton, Ltd.* between Chicago and St. Louis. Soon we shall have gorgeous, glittering things like the *Rheingold Express*, which streaks its violet, ivory and gold from the North Sea to the Alps; like the *Golden Arrow Express*, which carries trippers from Calais to Paris at 60 miles an hour, in amber and cream cars, for $3.35 extra fare. Indeed, the Iron Horse has become most piebald on the Denver & Rio Grande Western Railroad, which, running through the Grand Canyon, has decorated its cars in colors "symptomatic of the Grand Canyon at sunset". There are occasional backslidings, of course—a conspicuous example being the unaccountable reversion of the Chicago & Northwestern from lemon yellow to "Pullman green." Meanwhile, as the railroads have taken to color, so also has the railroads' sleeping partner, the Pullman Co. "Color," believes James Keeley, Pullman's Assistant to the President, "is becoming more and more of a selling urge." The urge has resulted in a variation from the standard mahogany and walnut graining with green and black carpets in favor of flat tones of grey, buff and blue.

As color for identification and color for attention are both susceptible of classification under the broader heading of color for advertisement, a discussion of these types of color would hardly be complete without reference to advertising color in the more technical sense of colored advertising pages. Charles Daniel Frey notes that on October 18, 1924, the *Saturday Evening Post* printed its first four-page insert of full color advertisements (Simmons Steel Bedroom Furniture, Whitman Candy, Heinz, Kraft Cheese). In that year the *Post* scheduled 20 four-color pages at $10,500 a page, netting the Curtis Publishing Co. $210,000. Last year the *Post* scheduled 1307 four-color pages, at $11,500 each, making gross receipts of $15,030,500. From this expenditure advertising agencies collected not less than $2,250,000 in commissions, while advertisers paid the more popular commercial artists from $500 to $1500, apiece, for washes and oils. One of the most interesting by-products of the four-color advertising era is the commercial artist who, working almost entirely from relatively complete black-and-white sketches prepared by art men in agency studios, can readily secure himself an annual income of $40,000, $50,000, $75,000, and up. Color in advertising had its genesis in the attention value of the color page as opposed



TRAVEL AIR SIX-PLACE CABIN MONOPLANE AT ROOSEVELT FIELD, L. I.

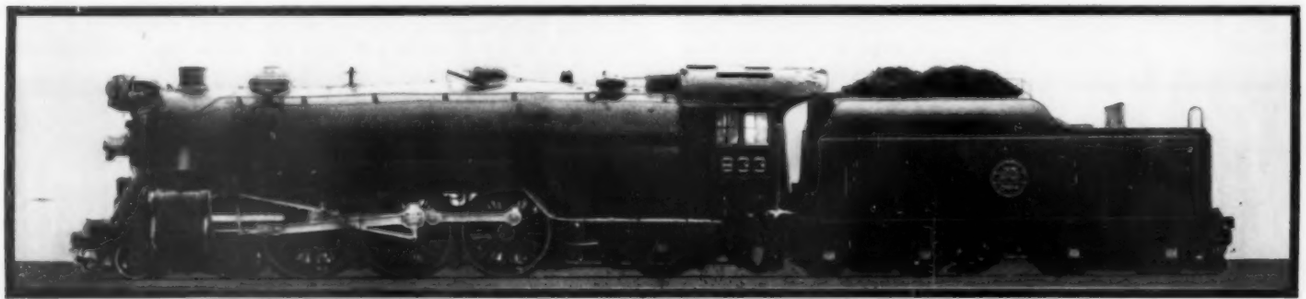
to what were then the prevailing black-and-white pages. It received a tremendous impetus, however, from the spreading vogue of colored merchandise, for obviously the manufacturer featuring color in his automobile, his bathtub or his crockery would use color pages for the appropriate and accurate representation of his product.

It may perhaps be argued that in all the color manifestations thus far discussed the element of beauty was not entirely absent. Nevertheless, the element of beauty was certainly (with the possible exception of the renovated Pullmans) incidental. Aesthetic considerations, however, did move the Consolidated Gas Company to paint its waterless gas holders (on Manhattan and Long Island) in from four to fifteen colors, shading from a dark base to a light crown. They are barely visible on the average day. As nearly as any tanks with a capacity of 15,000,000 cubic feet may be made elusive, chameleon-like objects, these examples of industrial camouflage have disappeared into their surroundings.

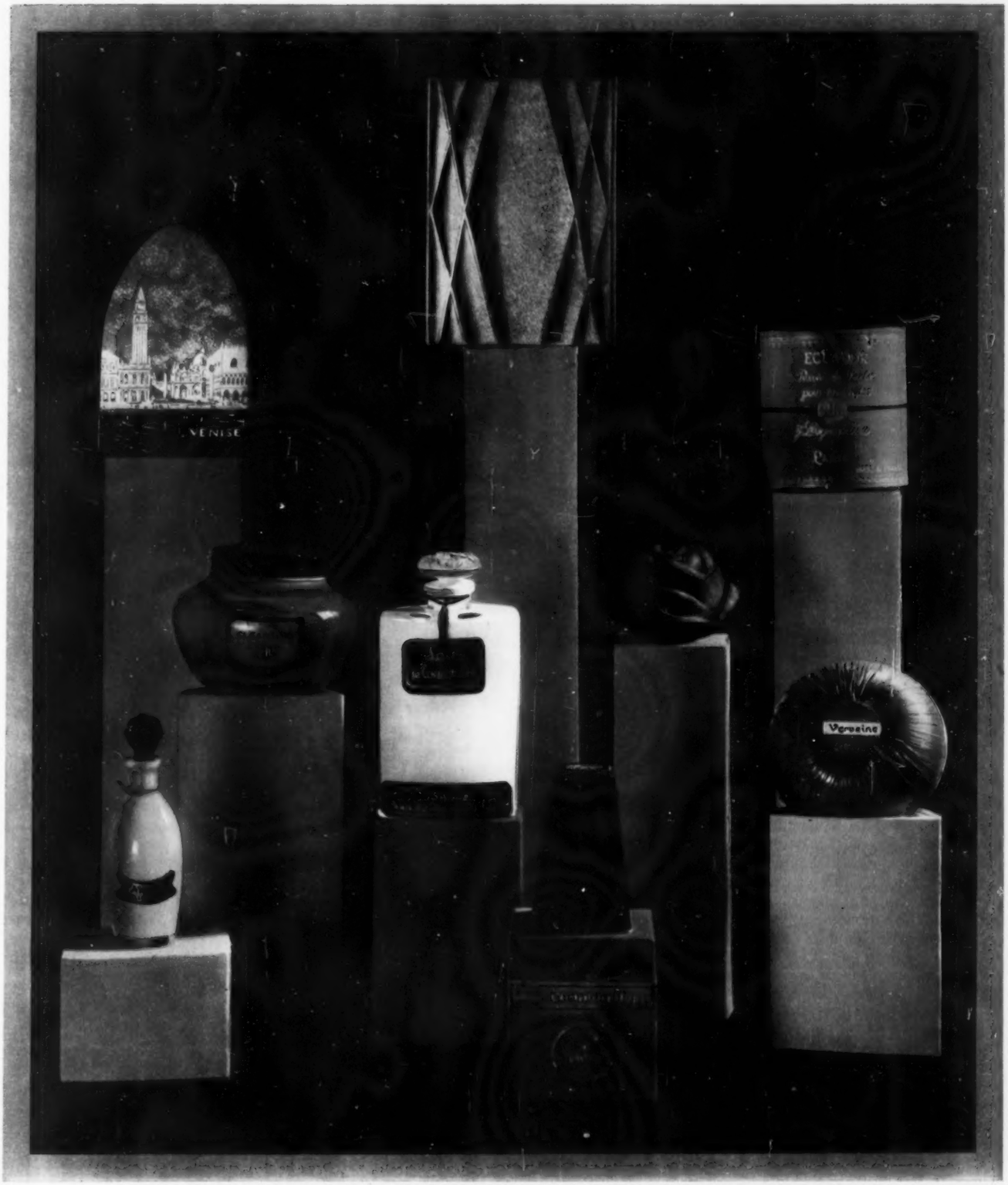
Custom & rule

There is another large division of industrial color from which aesthetics are entirely missing. This division is the standardization division—well illustrated by the prevailing tendency to make tonics red (perhaps through the suggestion of the red-blooded results) and indigestion remedies green. Violet-scented soap, candy and perfume are usually violet in color; synthetic cherry jam and orange drinks are generally closer to the natural fruits in color than in taste. Quintessence of standardized color is found in the Bureau of Standards in Washington, where a colorimetry laboratory fixes standard colors for such commodities as tobacco, bricks, chocolate, flour, meats, honey, false teeth, tomatoes. In each of these cases, it is custom which dictates color and standardization which turns custom into rule.

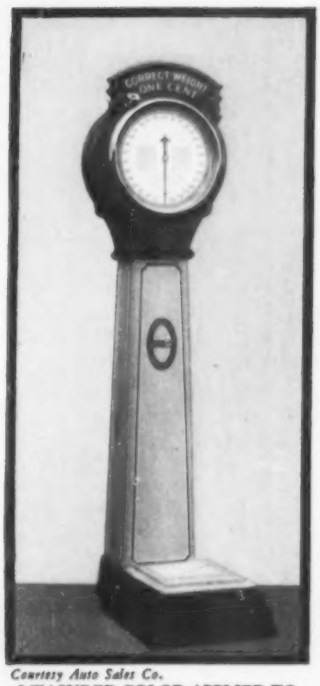
It will therefore be observed that color in industry did not reach and has not reached the proportions of an epidemic, even though the dots of color on the American scene are undoubtedly increasing. Color in the home, however—color as applied to the daily life of the normal citizen—was unquestionably a vogue and has continued to exert a definite and a powerful influence. The young housewife of today is called upon to pronounce aesthetic judgment upon such varied and extraordinary objects as wheelbarrows, washstands, stoves and ice cubes. It has become possible for her to say: "I hate that double boiler", or "I think that bathtub is beautiful". It is perhaps true that an object such as a garbage pail should not appropriately be tinted like the flowers of the field and it is perhaps peculiar that bathrooms should be so reminiscent of Solomon in all his glory. On the other hand, there is in color a warmth and a vividness, a suggestion of life and movement, a variation from drabness and monotony. Certainly color has fitted the tempo of the times. Striped tables were appropriate to short skirts. Yellow desks had an affinity for bobbed hair. Nearly everyone likes bright colors. And, in this post-war period of broken precedents, of weakened traditions,



THE BLUE COMET (C.R.R. OF N. J.) MAKES ITS PROFITABLE RUN BETWEEN N. Y. AND ATLANTIC CITY



MR. ARTHUR S. ALLEN ARRANGES A DISPLAY OF BRIGHTLY-COLORED SOAPS AND PERFUMES, USING THE MATHEMATICAL RELATIONSHIPS BETWEEN COLORS TO GIVE EACH SINGLE EXHIBIT ITS MAXIMUM EFFECT. ALONG SUCH LINES, HE BELIEVES, WILL WINDOW DISPLAYS DEVELOP



Courtesy Auto Sales Co.
MEASURED COLOR APPLIED TO MEASURED WEIGHT

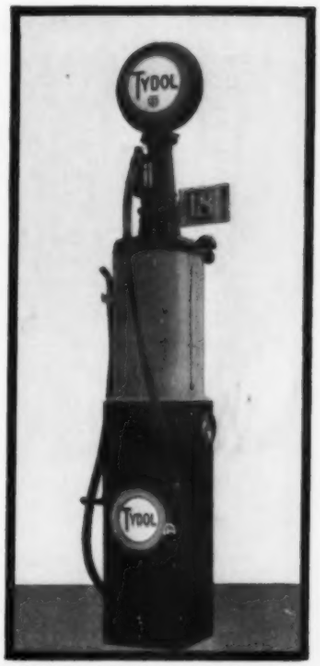
it is not surprising that old chromatic inhibitions should be shaken off and that the American people should gratify its instinct for color by bathing itself in a torrent of brilliant hues.

Fords & towels

Meanwhile, aside from cultural considerations, the color movement produced a notable economic activity. The most dramatic example of the economic strength of the color trend was of course evidenced in Henry Ford's futile opposition and ultimate capitulation to the movement in which General Motors did much to lead the way. Out of the war sprang one of industry's most ardent colorists, G. M.'s able Capt. H. Ledyard Towle. "I can make a stubby car look longer and lower," he announced. Other manufacturers, willingly drifting with the color stream, adding, indeed, the power of advertising to its velocity and energy, profited notably. For a long time the plumber had been selling mere sinks. Now he was selling Beauty. For a long time the maker of towels had dealt in a product standardized in white. Now he was able to attract the eye, and the pocketbook, with towels of every hue. In countless department stores countless salespersons explained that this yellow pot, that purple pan, were indeed essential ingredients to the contemporary home. In a suddenly kaleidoscopic world, color had become a master salesman, a distributor extraordinary.

Particularly active were the paint makers. Already E. I. du Pont de Nemours had developed Duco, a quick-drying lacquer which supplied the finish to almost all General Motors automobiles and many cars of other makes. The same qualities of easy application, fast drying and the formation of a hard, brilliant surface which made Duco so useful to the automobile maker recommended it also to the home-decorator. Therefore not only the du Pont company, but Sherwin-Williams, Devoe & Raynolds, and many a smaller paint-maker began pouring lacquer over the suddenly color-conscious world. Paint-advertising, indeed, developed a vigorous "paint your home" movement. Sherwin-Williams looks forward to the time when each year will see *two* paint jobs on the walls of the house, bright colors for winter and cool colors for summer. Booklets on interior decoration were widely distributed; interior decorators were employed to design kitchens and bedrooms and dining rooms in the new bright colors; housewives everywhere were urged to secure a supply of lacquer and try their hands at revivifying the old homestead. Perhaps not many color neophytes were sufficiently enthusiastic to attempt a complete redecoration, but no doubt a large number of individual pieces of furniture went through the lacquering process. Duco contributed a generous share to the du Pont 1928 net profit of $64,097,798; Sherwin-Williams discovered that reds, blues and greens had become sales leaders in place of the standard and traditional whites and greys.

CAMOUFLAGE MAKES THIS GAS HOLDER (21ST ST. AND EAST RIVER, MANHATTAN) NEARLY INVISIBLE



VIVID SERVICE STATIONS MARKET VIVID GASOLINES

Staples v. style

It should be added, however, that a considerable portion of the color sound and fury signified not very much in terms of ultimate profit, particularly for the small dealer. Whenever a staple goes in for style, the ancient problem of novelty versus standardization immediately asserts itself. If a product formerly manufactured in three colors is manufactured in forty colors, total sales of that product are doubtless increased by the color variety. Yet, even if sales in the three original colors are not injured, the dealer has forty additional lines to complicate his turnover. Some of the colors may be partial failures, some may prove to have practically no appeal.

Around the World was playing at the Hippodrome. Beneath one of its Broadway signs at 45th Street was the ad for *Coronet Dry Gin—Rickeys & Fizzes*. There was insolence in the griffon over the sign *Rector's*. This was in 1908 . . . There has been much rewriting since on Broadway. The Great White Way, still great, is no longer white. At sundown, the polychrome signs blaze their legends for the thousands who seek recreation and the hundreds whose jobs they advertise. Their coruscation troubles New York's sky. From afar off it looks as though part of the city were afire.

All such ugly ducklings exercise an extremely unhealthy influence on total profits an influence which ultimately reacts on the manufacturer's sales. Makers and sellers of women's shoes went through the same process of styling a staple when short skirts put both shoes and stockings in fashion's limelight. The result was an unquestioned increase in unit prices and in gross business, but coupled with a bewildering multiplicity of "numbers" (i.e., styles) many of which were sold, if at all, only at clearance bargains. Staples *do* profit by the addition of a style element, but not when the style element pushes them too far into the novelty field.

It is for this reason that some of the more weird manifestations of color have already disappeared and that there is a present emphasis upon the scientific approach to color.

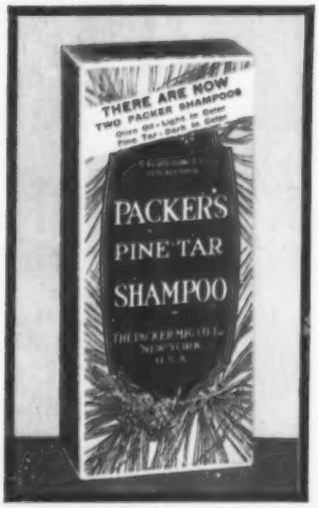
Minor examples of the application of accurate (as opposed to haphazard) color may be observed in objects as disparate as oil tanks and hospitals. Petroleum, gas or liquid, expands with heat; light colors prevent heat absorption; hence tanks painted with white or aluminum paints prevent evaporation, preserve almost intact their allotted quotas of petroleum. The Department of Commerce reports the widespread adoption of colored textiles for hospital decoration (incidentally providing a new use for cotton), while the walls of one Chicago hospital have been painted green in an effort to rest the surgeon's eyes as he looks up from the wound before him.

Hue, value, chroma

But science has come to the aid of color in a manner much more significant and inclusive. Through the analytical color discoveries, about 1900, of A. H. Munsell of Boston, we have learned to describe color in terms of Hue (the color), Value (the amount of light any given color reflects) and Chroma (the

Courtesy James McCutcheon & Co., Cannon Mills, Pepperell Mfg. Co.

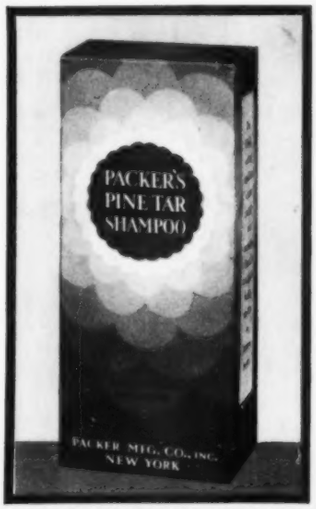
LINEN OF ALL TYPES, FOR DINING-ROOM AS WELL AS FOR BEDROOM, FOLLOWED THE COLOR REVOLUTION



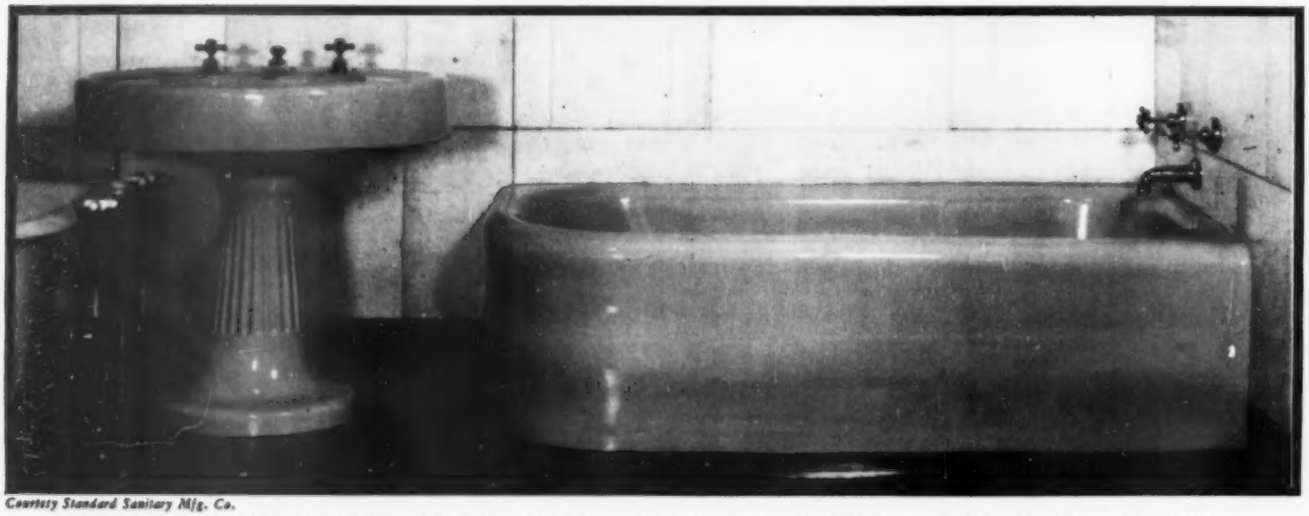
SALES INCREASED WHEN THIS PACKAGE . . .

intensity of color). By these three dimensions, we reduce a color wave to a definite entity just as the musician reduces a sound wave to a note in a scale. Within the last few months we have gained an instrument called a color analyser, which measures the amount of red, yellow, green, blue and purple in any material and records on a cylinder the wave length reading of each color.

The mechanization of color judgment is no new notion. Colorists for a long time have mouthed such words as spectrophotometer, colorimeter. But most of these instruments depended ultimately on the human eye and were notoriously weak in breaking down the violet end of the spectrum. The latest instruments, perfected by Prof. Arthur C. Hardy, are a complicated system of prisms, photo-electric cells, filament tungsten lamps, flicker discs. Known as the recording photoelectric color analyser, the instrument has these cardinal virtues: it eliminates the human error in reading color, it analyses correctly for any given angle at which an object is usually viewed (roofs as opposed to dresses), for any amount or kind of light to which an object will usually be exposed (dresses by day, dresses by night), it is efficient for reading the violet end of the spectrum, it is quick (approximately 30 seconds to a



. . . WAS REDESIGNED AND GIVEN PROPER VALUES



Courtesy Standard Sanitary Mfg. Co.

ONE OF THE MOST SURPRISING RESULTS OF THE REVOLUTION WAS THE APPEARANCE OF THE BATHROOM AS A SHOW PLACE

reading) though it can submit a piece of material to illumination of 150 lumens per square centimeter (15 times more intense than full sunlight on a clear summer day), there is no danger from heat. (Professor Hardy's own description of his color analyser is printed in the Appendix.)

Case-hardened empiricists may sniff at mechanical color contrivances, but the days of their sniffing are numbered. Both the Armstrong Cork Co., largest of U. S. linoleum manufacturers, and the Mohawk Carpet Mills, Inc., one of the largest rug and carpet makers, pay high retaining fees to Arthur S. Allen, who is perhaps the leading American color authority. When Mr. Allen visited the Mohawk Carpet Mills, Inc., he discovered its designers working empirically and haphazardly with thousands of tufts of wool, each of a different color. Gradually he showed them how just as many and as varied color-combinations could be created from 600 tufts, scientifically selected and arranged. Much the same problems are being met in much the same way, by Mr. Allen, at the Armstrong Cork Co. More obvious examples of the application of science to color are seen in the redesigning (with gratifying sales increases) of packages used by the makers of Lifebuoy Soap, Bokar Coffee, Kotex, Packer's Pine Tar Shampoo. Toward the tangible statement, the mathematical expression, the scientific colorist now feels his way. Upon his success or failure in large part depends the nature of the future use of color.

Barbaric towers

Inevitably, the color wave must leave its mark upon the customs and habits of thought of a people reticent and suppressed in matters of decoration. It was not long ago that Anglo-Saxon poets sang of the "barbaric splendors" of the East, insinuating notes of virtuous disapproval in faultless hexameters. There was something vaguely shocking about temples and palaces which glittered like prisms in the sun. Yet last fall, at the dedication of Yenching College (near Peking), Anglo-Saxon architects enthusiastically applauded the marriage of Eastern aesthetics (blue-tiled pagoda roofs, red lacquer columns, white walls) to Western structural efficiency. And along the business streets of our (more or less) Anglo-Saxon cities arise buildings of industry which begin to bear a not distant resemblance to the "barbaric" East.

There are differences, of course, both in quantity and in quality. Architectural color still resides chiefly in plastic and non-essential ornament, in friezes and mouldings. That color is itself ornament and may be applied boldly to the very structure of a skyscraper, is still held to be advanced and possibly dangerous thinking. Our materials are not like those of the East. We have no supplies of rubies and emeralds with which to stud our columns. But we do have fixed colors in terra cotta which will outlast the pigments (although not the ceramics) of the East by many generations. Curiously enough, this matter of material has had a close association with the question of "barbarism". The most timid Anglo-Saxon can view a red brick building without either a moral or an aesthetic flutter. Put the same building in the same shade of terra cotta, and its acceptance will drop. Put it in some new plastic such as casein (as Mr. Buckminster Fuller would do), and the building will be dismissed as a stunt. The distinctions are absurd, but they have emerged from long familiarities and long distrusts.

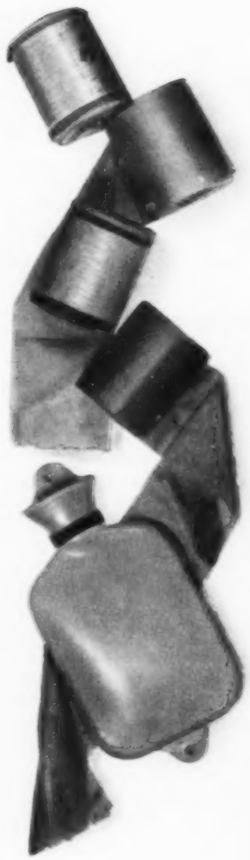
The result is that America has not yet seen a major architectural effort in which color has been unreservedly and intelligently used. The office buildings of New York and Chicago and Detroit are flecked with brilliant (and not always attractive) patches; gold-and-black has been exploited in mar-

SKETCH FOR A SKYSCRAPER, IN FULL COLORS, TO BE DEDICATED TO FASHION

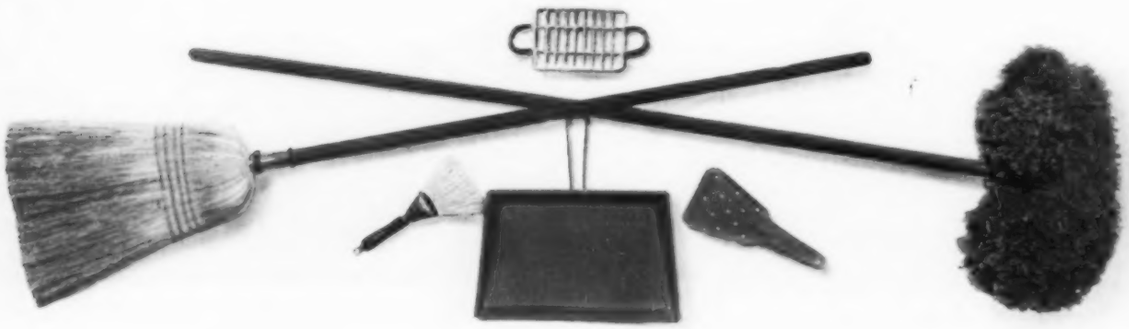
XUM

ble façades and over entire exteriors (the dramatic American Radiator Co. building in Manhattan); colored terra cotta appears on markets (Torrance Market Building, Los Angeles), on warehouses (Reebie Bros., Chicago), on restaurants (Coney Island). But nowhere has a great skyscraper risen, full-bodied, gleaming with color. In spite of Yenching, in spite of beautiful and durable materials, in spite of color-drenched interiors, no builder has been willing to gamble the future of a $15,000,000 building on the conviction that the color wave also scales its outside walls.

No colored skyscrapers in steel and cement, but many in drawing-paper and water-color. Students at art schools submit them as theses; the National Terra Cotta Society reproduces them in workmanlike booklets; architects design them in their spare hours. FORTUNE prints, upon a preceding page of this article, a picture made for a practical businessman by a practical architect who believes it can be and should be translated into fact. To Architect William Bergen Chalfant of Pittsburgh went Mr. Amos Parrish, New York fashion analyst. He asked for a design for a skyscraper to be dedicated to Fashion. A highly practical and profitable building, faced with standard-sized terra cotta blocks, rising 720 feet above the street, this skyscraper would be the first to discard colored ornament—discard ornament altogether—and rely upon honest color itself to create its emotional effects. It is hard to exaggerate the importance of Mr. Chalfant's practical study for a practical purpose. If the Fashion Building does arise, if it is commercially successful, New York may yet challenge the magnificence, if not the tranquillity, of the New Jerusalem.



Alone among the arts which serve industry, architecture lags behind in the rush to know and use color. When at length it comes into its stride, it can make the most spectacular exhibition of all. The splendid Jain temples of Jaipur, gorgeous with their emeralds and rubies and sapphires, will pale beside a green and orchid tower, vaulting a fifth of a mile into the air. We shall outdo the barbarians. And our poets will applaud.



When Wall Street Buys Orchids

Wall street makes money.

FROM the seaweeds of the East is extracted a substance known as agar, not unlike gelatin in its behavior, useful for varied and rather curious purposes. It is an ingredient of the Chinaman's bird's-nest soup. But it is nearly tasteless and has adulterated many jars of jams and jellies. It possesses some laxative qualities. And it is the one food upon which baby orchids may safely and happily feed for the first six months of their precarious lives.

Because of agar, orchids will some day cost less than the $5 or $10 which is the florist's present price. One of the many perils which beset the orchid has been removed. Before the Cornell University laboratories devised pale, jellied pools of agar, nurserymen planted orchid seeds in fungus. Sometimes it was a friendly fungus, and then the orchid flourished. More often it proved to be an enemy fungus. Then the fungus flourished and the orchid died.

500 ORCHIDS IN EACH GLASS TUBE—THE TUBES ARE FILLED WITH AGAR FROM CORNELL, AND ARE STOPPERED WITH COTTON

AT THE AGE OF 6 MONTHS—100 TO A POT

Now the nurseryman using the Cornell agar preparation may count himself safe for that period when the orchid is still at the figurative breast of its mother. Earlier, in the pod which is the orchid's womb, the embryo is quite safe. It is the mother plant which is likely to die when at length it brings forth, with one splendid gesture of fertility, no less than 750,000 offspring. Later, when the agar-nourished green specks have been lifted on the points of platinum tweezers (most delicate of operations) to a waiting pot of peat moss, life becomes comparatively cushioned and secure. Agar bridges the dangerous age.

Before the dangerous age, the orchid meets many perils. The mother plant may have sickened and died on its long journey from some tropical tree-top to the orchid clearing-house in England. Or, if it escaped death, it may have carried death with it. At Washington, government inspectors watch closely each of the few hundred plants which may be imported under Quarantine No. 37. If on a green leaf appears a

minute spot of yellow, the leaf is cut and put under the microscope. If the spot is found to be alive with insects, eating, boring, then only fumigation can save the mother orchid's life and bring it back to health.

From the tropics to England, to Washington, to Bound Brook, N. J.—nearly nine thousand miles of trains and ships. The plant is frail and weary; it must rest before it serves the ends of the Thomas Young nurseries. Here, where more orchids bloom than in any other spot on earth, it is crossed with another, perfect form meeting perfect color. In nine months the pod appears. Thence the seed moves to the pale pools of agar, thence to a pot with 49 of its fellows. Thence, after a year, to a pot with only four others, and finally to an individual pot of its own, where it is nourished by the small, tangled roots of the Royal Palm, called peat moss. From time to time, fresh moss, the cleaning of the plants, the search for the fatal cattleya fly. At length, after seven or eight years of vigilant care, comes the bloom.

These eight years of labor and danger are what lie behind the wholesale price (about one-half the retail price) of the orchid. For in spite of the somewhat precious and esoteric atmosphere with which the orchid is surrounded in the popular mind, the business of growing and selling these flowers is now a highly scientific enterprise. The dilettante collectors, of whom the late Jay Gould was the most famous, have given

TWO YEARS OLD—EACH PLANT HAS ITS PRIVATE POT

NEW PEAT MOSS FOR FULL GROWN PLANTS

way to bankers and distributors. True, Mr. Albert C. Burrage, whose great fortune came from two copper companies (Chile Copper Co., Amalgamated Copper Co., both now owned by Anaconda), has the finest private collection in America, while the Duke of Marlborough and Sir George Holford still add to their conservatories in England. But none of these collections compares in size with the 500,000 plants in the nurseries at Bound Brook. And none of these collectors is as important to the orchid as Mr. Arthur H. Bunker, director of Thomas Young Nurseries, Inc.

On April 20, 1910, Marjorie Gould married Anthony J. Drexel at the Plaza Hotel in the presence of American society and 5,000 slightly ostentatious orchids. But on March 30, 1929, Bound Brook shipped 11,000 orchids to the Easter parades of New York and Philadelphia. Twenty years ago, the 5,000 were a luxury and an extravagance; the 11,000 of last Easter were the result of mass production.

With Production on such a scale, averaging in normal months 1,000 blooms a day and reaching 3,000 or 4,000 daily in the January season, Distribution cannot lag far behind. The orchid is graded for color, size, form and kind. Sewed in a box with 40 or 50 others, it travels the 35 miles from Bound Brook to New York. If it goes farther—and Bound Brook has picked 1,000 miles as its market radius—each stem has its

[*Continued on page 126*]

Courtesy Thomas Young Nurseries, Inc.

ENID CATTLEYA

LITTLE would the debutante, on whose shoulder this orchid might be pinned, suspect that it is a cross of Mossiae and Warscewiczii, that its full name is Enid Cattleya. It was first shown by James Veitch & Sons in London, England (1898). Its greatest period of harvest is in the fall, from the middle of August to the first of December. Its average retail price: $6.00.

Automobilization of the Orient

Some random notes thereon.

PICTURESQUE and profitable is the exportation of the automobile to the Orient. Fords in the Himalayas, Chevrolets in the Sudan, —filling stations next to temples and punctures in the shadow of the Sphinx. Here, too, waiting for roads to travel on, is the Next Great Market. No point of saturation and a thousand miles between the bumpers. "Ship me somewhere east of Suez," is the current automotive theme song. Below are sketched a few points of interest along the auto-road to Mandalay, a few characteristic items in the colorful and remunerative process of teaching the Orient that sixes do beat fours.

India

With a population of approximately 300,000,000, India has some 125,000 motor cars—about one car for every small town or big village.

India's Satan is Black Yama and Mohammedans consider green an unlucky color. Therefore black cars and green cars are unpopular.

Elephants have caused many auto accidents, but now wear tail-lights, and—like tail-lighted London Bobbies—possess a high visibility.

Indian Rajahs love spot-lights, thus princely cars may carry ten or a dozen lamps.

Religious pilgrimages stimulate traffic, so also does the Hindu taboo upon a man's marriage with a girl from his home-town.

But it is considered unlucky to travel East on Monday, North on Tuesday or Wednesday, South on Thursday, West on Friday or Saturday. Evil days for starting journeys are Tuesday, presaging fire at home; Saturday, foreshadowing loss by thieves; Sunday, portending sickness. Misfortune results from payments or deliveries on Tuesday or Saturday, and all bargaining, buying, selling and paying are suspended at Vishagadi, the poisonous hour of the day.

Taxis in the Dutch East Indies cost $1 an hour. A round, white painted spot distinguishes them from private cars.

Persia

Motor trucks in Persia must compete with camel caravans, which charge only one-half the automobile figure, but cover only 25 miles in 24 hours.

Pilgrimages help Persian motor traffic, as the business man traveling by motor can complete in two weeks a religious duty otherwise requiring two months.

Officers and couriers, who once rode fiery stallions, now travel via sputtering motorcycles.

Persia's almost impassable roads have been improved by Colonel Alfred F. Morris, American engineer formerly employed by the Persian government.

Syria

Henry Ford opened up the Syrian market in 1921, sold 700 Fords. Now about 90% of Syria's 4,822 passenger cars are American built.

Syrian women do not drive and Syrian men consider it beneath their dignity to operate their own cars. Most Syrian automobiles are for public hire. Syrians are notoriously reckless and rapid drivers.

When the Ruwallah tribe of Bedouins breaks camp, the camel of its chief, Nuri Shalaan, ceremoniously leads the caravan. But Nuri Shalaan himself rides in a Buick, driven by a Bedouin chauffeur. Like other Syrian motorists, Nuri Shalaan hangs blue beads on the radiator cap to ward off the evil eye.

Japan

There are almost 50,000 passenger cars in Japan, of which 94% are American made.

Japanese who suspect that a demon may be following them, run in front of motor cars, believe that the closer the car comes to them, the surer it is to run over the demon behind them.

Collisions are amicably settled. First there is much ceremony in the street. Then the driver of the larger car takes the blame, sends the driver of the small car apologies, flowers, fruit, money.

Japanese taxi-men drive American cars. But Japanese traffic keeps to the left. So Japanese taxis carry one driver and one watcher. Japanese taxi men do not take tips.

Passenger car trade has recently been almost stagnant, with many dealers in bad financial condition.

China

There are about 18,000 passenger cars in China. Outside of Hongkong, American makers supply about 75% of Chinese cars. The percentage in British-ruled Hongkong falls to about two-thirds.

The first motor car came to Hongkong in 1910. Others followed and ran down many pedestrians accustomed to dodging only jinrikishas. For some years Hongkong automobiles were restricted to a few roads near the water's edge. The leading foreign car is the (English) Austin.

Total vehicular traffic in Tibet is 1 motorcycle.

In Mukden, citizens heard that American policemen and firemen rode free on common carriers. Therefore they accoutred themselves in miscellaneous uniforms, stormed busses, would pay no fare, disrupted bus service.

In Szechwan, remote Chinese province about the size of Texas and with a population of 50,000,000, motor roads are being opened even before railroads. Existing roads are extremely circuitous as they wind around ancestral graves, lest spirits be disturbed. Gasoline in Szechwan is $2 a gallon.

Exports and Imports

Department of Commerce automobile export figures gave a total of 560,102 automobiles completely built in United States territory and exported during 1929.

At an average price of $750 each, these cars had a money value of some $420,000,000. Automotive exports were valued at about half a billion.

It should be added, however, that a very much larger figure, both of units and of value, is obtained by counting all American-designed cars sold abroad. This total, adding to the Department of Commerce statistics the Canadian-built and foreign-assembled cars of American origin, gave a 1929 sales abroad figure of 1,015,000 cars.

The value of these foreign sold cars, plus parts and tires, was $757,400,000.

Foreign cars imported during 1929 totalled 710.

Although the automobile industry went all over the world for the material out of which its cars were built, the value of the completed automobiles far exceeded the value of the materials imported to make them.

Greatest import was rubber, of which 913,920,000 pounds, valued at approximately $186,000,000, were used. Source of most rubber was British Malaya.

Tin from Malay States, and nickel from Canada were other major imports.

Australia supplied tantalum used in steel-alloys. From Canada came asbestos and from Ceylon came graphite. Chinese tungsten, Spanish cork and German barium are other foreign items in U. S. automobiles.

On the whole, it appeared that imported materials approximated a value of $250,000,000, or about one half the value of automotive products actually exported from the U. S.

Presenting the Living Rothschilds

In curious gallery.

"I AM of the opinion, Madame, that there never can be too many Rothschilds," said Benjamin Disraeli to Queen Victoria. Today there are 37 persons who legitimately bear the name of Rothschild, ranging from 85-year-old Baron Edmond de Rothschild in Paris to the 3-year-old Baroness Gwendolina in Vienna. There are half a dozen more, Rothschild-born, who have changed their names on marriage, such as Mrs. Clive Behrens, and the Baroness Ephrussi, who always wears pink taffeta and runs a well-attended chemin de fer table in her Paris house; and there must be at least a score of Rothschild nephews and nieces like Sir Philip Sassoon, Baroness Bettina Springer and her brother Baron Albert.

The following pages constitute an annotated gallery of Living Rothschilds. They are rich and respectable, like the Dowager Lady Rothschild of London; or rich and spectacular, like "Jimmie" de Rothschild; or rich and notorious, like Baron Maurice de Rothschild; or rich and imbecile, like Baron Georg von Rothschild; or rich and brilliant, like Baron Henri de Rothschild. Time has loosened the family ties, so that while all the Living Rothschilds know of each other, no Rothschild possesses a photograph album as complete as the gallery which follows.

THE COAT OF ARMS

By way of introduction we need refer but briefly to the oft-told tale of Rothschild origin. Nearly everyone knows about Mayer Amschel, the Jewish moneylender of Frankfort, who took the name of Rothschild from the red shield hanging over his door and who amassed a fortune lending money to impoverished princes and selling rare coins to collectors. No less popular in fact and fiction are his five branch-banking sons:

Nathan	1777-1836	of London
James	1792-1868	of Paris
Solomon	1774-1855	of Vienna
Karl	1788-1855	of Naples
Amschel Jr.	1773-1855	of Frankfort

Throughout the first half of the 19th century they made an unparalleled series of bold and accurate guesses and one appalling oversight. The oversight was America.

In any country, at any time, the Rothschild brothers could have become rich, but it was their guess about Napoleon that set them on their unique pedestal. The five brothers were clever enough to realize that for all his genius, for all his victories, Napoleon could not last. On that intuition they staked every penny. Nathan's fabled advance news of the Battle of Waterloo gave the Rothschilds an opportunity to buy depressed securities in London. Even without that coup, the day after Waterloo was to find all the established governments of Europe deeply in their debt.

Dealing with each other, sending secret messengers weekly back and forth across a continent, taught the Rothschilds the value of rapid communication. So they, and especially Solomon of Austria, guessed right about railroads, became the railroad builders of Europe. While Calvinist clergymen thundered against the steam engine as an invention of the devil, and country squires grumbled that the filthy tea kettles on wheels were running the countryside, the Rothschilds and their sons were digging into their coffers and pouring out gold to lay tracks. And the gold that they spent came back a hundred-fold.

On only one important point did the Rothschilds guess wrong. They never would have anything to do with the United States of America. Imagination falters at what the Rothschilds might be today if they had spent on the infant industries of this country half the sums they poured into Imperial Austria.

But the 37 Rothschilds and their kin are content. None is poverty-stricken. None has ever required an American wife to support him. Nobody sneers at them because they are Jews; nobody makes fun of the intricate Austrian coat-of-arms blazoned on this page which all the Rothschilds adopted after a bargain with Metternich. The results are several. Rothschilds still bring up their children according to the Talmud but the necessity for concentration no longer forces them to marry their own cousins or uncles. French Rothschilds still visit English Rothschilds, Austrian Rothschilds are frequently with both, but the solemn and stately annual family pilgrimages have disappeared. A hundred years ago Mayer Amschel used to walk down the Frankfort gutters, for fear his coat would brush against a Gentile; today one of Baron Robert de Rothschild's best friends is the devoutly Catholic Duc de Guiche, and the gentle, twittering Lady Battersea (Constance de Rothschild) is reputed to know more curates than anyone in England. Greatest change, the Rothschilds have become nationalized, in contrast with their ancestors who, in an age of fanatical anti-Semitism, felt no allegiance except to each other. Now there are various medals for valor on various Rothschild chests. Evelyn Achille de Rothschild died in battle as a British officer and lies buried in the Holy Land. Yet certain customs remain in common—every proper Rothschild girl receives on birth six pearls each worth £100 and six pearls on every birthday.

In finance, Rothschilds have become indifferent but never stupid. (Another dictum: "There was never a stupid Rothschild.") Branches of the original Rothschild bank remain in London, Paris, Vienna. Only a year ago financial disaster threatened the second largest bank in Austria. At the crucial moment, Baron Louis Rothschild, president of the largest bank, the Credit-Anstalt für Handel und Gewerbe, raced back to town from his deer forest, still in hunting clothes, and put through a last minute merger. Society, thereafter, dubbed him "Emperor of Austria"; Viennese newspapers, more discreet, hailed him as "the saviour of Austria"; better informed Austrians believed that Baron Louis had engineered the entire crisis and pulled off another typical Rothschild coup. But the Rothschild position in broken Austria is not characteristic. In finance, the Rothschilds are important customers rather than forceful operators. Shrewdly, but without too much effort, they manage their capital which is probably not as great as that of a dozen individual Americans. Control of the English bank was given to the sons of Dowager Lady Leopold de Rothschild over the head of the present Lord Rothschild, who was deemed financially incapable. But probably never again will the principal heirs be selected on the basis of comparative merit. The old control is gone. Society may rejoice in the increase of a tribe so consistently intelligent and colorful; but, so far as the fortune is concerned, there are, at last, too many Rothschilds.

England's Tribe of Nathan

DOWAGER LADY ROTHSCHILD. Here, as she was 25 years ago, is one of the few photographs of Emma Louisa, matriarch of the Tribe of Nathan, now old, deaf, crabbed and cross, the mother of the present Lord. She is a Rothschild herself, daughter of Charles of the short-lived Naples branch. Ages ago she came to London, married her first cousin, and saw him become, through the good offices of the pious William Ewart Gladstone, the first orthodox Jewish Peer in Great Britain. (The elegant Disraeli was a baptized member of the Church of England.) All through the Victorian era she was one of London's most brilliant, most lavish hostesses, a leader in Jewish and Christian charities. She is still able to open the ancestral home in Piccadilly on occasions, and preside, leaning on an ebony cane, at brilliant parties for her débutante granddaughters. Her greatest pleasure is a visit from her spryer 82 year old sister, the dowager of the French branch (see page 102).

Lafayette Ltd.

CONSTANCE, LADY BATTERSEA. To this bubbling, motherly, twittering friend of Disraeli, of Asquith, of bishops and countless curates we are indebted for *Reminiscences*, which contain invaluable genealogical tables. But her earliest work is a *History and Literature of the Israelites* published in 1869 for use in her free Jewish schools before she married that beautiful man and Christian, Cyril Flower, 1st Baron Battersea. She is now 87, second cousin of the flea-collector, good angel to both Jew and Gentile.

THE HONORABLE NATHANIEL VICTOR ROTHSCHILD. Here, operative at one of the most sacred fixtures of the London social season, the Eton-Harrow cricket match, is the heir to the Rothschild title, Nathaniel Victor, nephew of that great flea-collector, Lionel Walter, Baron Rothschild. The Hon. Nathaniel, batting for Harrow, is the son of the late Charles Rothschild who committed suicide from boredom, and in fear of approaching insanity. This present Rothschild heir once killed a man in a motor accident—a serious matter in England—but was immediately acquitted of manslaughter.

Sport & General

P. & A.

LIONEL WALTER, BARON ROTHSCHILD Lord Rothschild, titular and bachelor head of the British family, has little but his title to console him. Great-grandson of the founder of the British branch, he is probably the poorest of the elder Rothschilds although he could recently afford £350 for a Great Auk's egg. As a young man he was actually dismissed from the firm with £40,000 after a flood of blackmail letters and suspicious milliners' bills had swept into "New Court", the Rothschild bank. The Speaker of the House of Commons once requested Lionel Walter's father to forbid his son's inviting his mistresses to the Ladies' Gallery—improper society for the wives of honest M. P.'s. All that is passed. Lord Rothschild is now an eminent naturalist, and the most famous living authority on fleas. At Tring Park, the family seat, there are butterflies and birds, kangaroos and ring-tailed emus, and "Komodo Dragons",—giant lizards that race 30 miles an hour up and down their wired runways.

Keystone

NICA, MIRIAM AND LIBERTY ROTHSCHILD. Here is one of the most attractive Rothschild pictures in existence. It shows the three sisters of the present heir to the Rothschild title as they were a number of years ago, playing on the lawn of their father's country place. Today Miriam, in the center, is a strapping horsewoman; Liberty, on the right, is a talented musician with a studio of her own in one wing of her father's Palace Green town house, and little Nica is a justly popular sub-débutante.

L. N. A.

EDMOND LEOPOLD DE ROTHSCHILD, being smeared according to an ancient Gentile tradition with the blood of an unclean beast, is the 14 year old heir to the Rothschild fortune. (He is respectively son and nephew of the financiers shown immediately below.) In November Edmond made his début in the hunting field, was lucky enough to be up with his shaggy Shetland pony at a kill, and was solemnly "blooded" with the stump of the dead fox's brush. A few months earlier he made still another début when he stood at his confirmation in an Eton jacket, a high silk hat and a prayer shawl, beneath an intricate stained glass window dedicated to his great-great-grandfather (the English Founder), and glibly read in Hebrew his Chapters of the Law, while a bearded rabbi pronounced him Bar Mitzvah—a Son of the Commandment.

Acme

LIONEL NATHAN

© Sport & General

AND HIS BROTHER, TONY

© Sport & General

DOWAGER LADY LEOPOLD DE ROTHSCHILD. No Rothschild is a better horsewoman than the Dowager Lady Leopold, née Marie Perugia of Trieste, aunt by marriage of the present Lord. When Leopold, her husband, was a small and scowling baby the romantic Mrs. Disraeli said to his mother: "My dear, that beautiful baby may be the future Messiah whom we are led to expect. Who knows? And you will be the most fortunate of women." Dowager Lady Leopold became not only the wife of the Little Messiah but the mother of the two present partners in the firm of N. M. Rothschild & Sons.

P. & A.

TONY'S WIFE

© Marcus Adams

TONY'S CHILD

Gaudy though their trappings may be, we have on the left the only two partners of the house that paid for Suez—N. M. Rothschild & Sons. Lionel Nathan, age 48, attending a court levee in his uniform as major in the Honorable Artillery Co., horse battalion, is the senior. A little pompous, this Nathan was an M. P. from 1910 to 1923, representing Aylesbury which has sent up a Rothschild ever since 1865. At his country estate at Exbury he breeds show orchids and raises intricately hybrid rhododendrons. His children are brought up according to the Talmud, but he is nevertheless fond of bacon for breakfast.

Spectacled smiling Anthony de Rothschild in pink, is shown here at a meet of the Rothschilds' favorite pack, the Whaddon Chase. Tony is the most exemplary of all Rothschilds. He works hard, goes to bed early, reads instructive books. At Harrow he was Senior Prefect. He took honors in history at Cambridge, and would have been a history don but for his sense of responsibility to the family bank—a responsibility which his grandfather forced upon him when the present Lord Rothschild took, irredeemably, to ladies and fleas. He exercises regularly and plays an excellent game of squash. True, like other Rothschilds he supports a racing stable, but only to improve the quality of British horseflesh.

When, in 1925, Tony married Yvonne Cahen D'Anvers (offspring of the Belgian bankers who have had business and social relations with the Rothschilds for generations), half the banking houses of Europe were represented at the wedding. Although she has failed to produce a manchild (Renée is only child) she has achieved social éclat as those who attended the Romance of History ball can testify. There she wiggled as a most seductive Cleopatra without reflecting the slightest discredit on the Rothschild name.

The Tribe of James of Paris

BARON EDMOND DE ROTHSCHILD. The Absolutely Original Mayer Amschel of Frankfort, who begat The Five Brothers, died in 1812. In 1824, more than 100 years ago, his son James, the astute, red-headed founder of the French branch went to Frankfort and married his own niece. The fruit of this curious union (which according to the Council of Trent, 1568, is not incestuous in the case of ruling Princes) was four sons and a daughter. On the left, is the only living son of James and Niece, and the only living grandchild of the Absolutely Original Mayer Amschel.

The gentle courtly Baron Edmond recently gave 30 million francs to biology and chemistry, and other millions to Zionism. Still to the world at large he is chiefly known as the father of the two spectacular brothers, James and Maurice (see below), who, incredible as it may seem, are of the same generation as the old lady on the right.

In 1881, two dozen Rothschilds escorted to Père Lachaise the body of that Baron James de Rothschild who was the husband of the autocratic old lady in the upper right. With the cane strode the First Lord Rothschild.

U. & U.

THÉRÈSE, DOWAGER BARONESS JAMES DE ROTHSCHILD, 82, younger sister of the crabbed old matriarch of England's Tribe of Nathan, whom she goes to visit twice a year.

Autocratic, indefatigable, she indulges her passion for activity in countless charities. During the mornings her salons are so full of petty petitioners that early callers are relegated to the vestibule. In the afternoon her higher class beggars (ruined aristocrats and the like) occupy her until four; then in her carriage with its armchair she makes her rounds of visits, distributing chocolates here, a jeune fille's dowry there, a chicken elsewhere.

She bore the most talented living Rothschild—Baron Henri.

Daily Express

BARON JAMES DE ROTHSCHILD, at left. Our Jimmie, to the English sporting public, is a member of Parliament from the Isle of Ely, and the most flamboyant of all the Rothschilds in England. The "Isle of Ely" is no island, but that sudden hump of land high over the plains of Cambridgeshire on which stands the cathedral city of Ely. Likewise Baron Jimmie is not really a British Rothschild at all. He was born in Paris in 1878, eldest son of Baron Edmond (above), and is a naturalized British subject.

Wherever horses are running and ladies are lovely, there one may find the saturnine Jimmie with his gray top hat, his spats, his sponge-bag trousers, his unforgettable face, and his monocle—a legitimate monocle, for Baron Jimmie is blind in one eye. Though he fought with distinction in the war (with the Jewish Legion in Palestine and as Major of Royal Fusiliers), his blind eye was caused by a golf ball, not a bullet.

Always lucky, he won £75,000 one racing day and inherited Waddenson Hall from his English aunt who, three days before she died, decided she preferred the gallant French Jimmie to the industrious English Tony.

MAURICE ("MOMO") DE ROTHSCHILD, in bathrobe. Jimmie is an M. P., Momo, his brother, is a Senator of France. Jimmie's taste in trousers has lost him many Conservative votes; Momo, not to be outdone, went to his cousin Tony's wedding in a pair of mustard yellow trousers and a blue tail coat with brass buttons, and Maurice's beach robes are one of the sights of Deauville. Nor did Our Jimmie outdo him in the matter of aunts, for Maurice ingratiated himself with Baroness Adolphe Rothschild (ugly blue-stocking in a blond wig who reeked of fat cigars) and from her got a big estate near Geneva. On it is an aquarium of blue trout which are fed daily with the heart of one bull.

In Maurice's spectacular career he has been the owner of Sardanapale, a Grand Prix winner, he has fought a duel over a horse and refused to fight another duel with Cartier, the jeweler, whom he had insulted. For bribery in elections, to wit, buying new uniforms for the local fire department, new cows for the peasants and drinks for all on election day, he has long been notorious, but only once did French Parliament go so far as to unseat him. He was divorced from a famous beauty but his gallantries are now said to be innocent. However, with the talented English painter Augustus John he was cited as a corespondent, and last year he was sued for accidentally peppering a fellow grouse shooter with bird shot. His Paris home has a ceiling by Romain, endless paintings and everything that the notorious Benvenuto Cellini made for François Premier.

International

© Sport & General

BARON EDOUARD DE ROTHSCHILD, above, with wife (Germaine Halphen) and daughter (Jacqueline). In the finest Rothschild railroad tradition, he is President of the *Chemin de Fer du Nord* which connects Paris with north-eastern France and thence Germany. As the eldest son of the eldest son of French Founder James, he is head of the Rothschild bank in France and as such a Regent of the *Banque de France*. With a Paris palace once owned by Talleyrand, with châteaux at Chantilly, Ferrieres and Cannes, he is socially the most distinguished. His wife dresses the part, but when asked who painted some picture on her walls will reply: "Je ne me rappelle plus si c'est un Raphael: je le demanderai à Edouard." Thus, at the moment, there are four Paris Rothschilds especially to be remembered—old Baron Edmond; his son, Baron Maurice, the notorious Senator; his nephew, this Baron, the financial head; and Baron Henri, the most justly celebrated (see below).

BARON ROBERT DE ROTHSCHILD, shown leading in one of his triumphant racehorses, is the only French Rothschild to play polo. At Chantilly he owns a magnificent château with fabulous decorations by a modern Russian artist. There he supports a private race course and polo field and plays a full schedule through the season, under the pseudonym of M. Errer (his initials are R. R.). Scientific visitors to Chantilly are more interested in his vegetable garden where he raises unbelievable piebald gourds for table decorations. In the Rothschild tradition, he is the proprietor of what is often considered the finest red wine in the world, Château Lafitte, much admired by his nephew, Sir Philip Sassoon. Recently he has taken over from Baron Edouard (on left) most of the responsibility for Rothschild financial affairs, including railroads in France and Spain. Baron Robert, despite his youthful appearance, has three grown children,—James, Diane, Cecile.

BARON HENRI DE ROTHSCHILD (above *and* to the left) is the most elegant of the French Rothschilds. He was for years a practising physician, a cancer research worker. The big milkmen cursed him when he founded Paris's first free milk stations. He and his mother (see opp. page) founded the Hôpital Rothschild in Paris and another hospital in Tangier. And his wife (Mathilde Weisweiller) was France's "Florence Nightingale of the Great War". Under two pseudonyms, André Pascal and Charles des Fontaines, he is an essayist and playwright of note—his most famous plays being *Caducé*, an exposé of fashionable doctors and *Cræsus*, a satire on a rich man's philosophy. Like other wine lords he loses money on his great Bordeaux vineyard of Château Mouton-Rothschild (on all of whose bottles his name appears in full), but he manufactures at a profit the perfume *Isabey*—named after the 19th century miniature painter. Because thundering busses disturbed him in bed and the pastels on his wall and the wine in his cellar, he sold his ancient home to the Union Interalliée, where American expatriates now tea.

Baron Henri de Rothschild's real fame is as a patron of arts. Himself versatile, intelligent and explosive, he is, without question, the Lorenzo de Medici, the Otto Kahn of modern Paris. He has endowed a home for infirm playwrights at Suresnes, he has backed poets, painters, art galleries, schools. Only a few months ago he made his most magnificent gesture by presenting his delicate, dilettante son Philippe with a two-million-dollar theatre to play with, the Théâtre Pigalle, a gorgeous affair of scarlet leather, nickel railings, mahogany-colored tin and intercepting arcs of light. It contains a ballroom, a dining room for first nighters, a bar, a quadruple rising and falling stage, and the most perfect mechanical equipment in Europe.

Baron Henri has done and does everything. He yachts on *Eros*. He shoots rhinoceroses in mid-velt and sits on them under an umbrella (above). We also print two pictures (on the left) showing him with and without the beard he wore so long in the manner of an apache.

Besides the dilettante, Philippe, he raised a son who flew bravely in the war and married a distant French relative of the U. S. du Ponts after he had written four pounds of love-letters to a girl who sued. Space is lacking for pictures of his sons but on the left is that most charming hostess, his daughter Nadine Charlotte (Mme Adrien Thierry). She sketches, sculpts, wears the finest string of Rothschild pearls, and raises three beautiful great-grandchildren for Thérèse, the Dowager Baroness.

GUY DE ROTHSCHILD, on right, son of Baron Edouard, is chief heir to the Rothschild business in France—as his cousin Edmond is heir in England. Like all younger Rothschilds he speaks English perfectly. He is here shown playing golf at North Berwick, Scotland.

© Speaight, Ltd., Harris's Picture Agency

© Sport & General

Austria's Tribe of Solomon

Wide World

BARON LOUIS ROTHSCHILD. It was in London and Frankfort that the Rothschild power first was felt, but it was from the grateful Hapsburgs that the family received its first honors, its coat of arms, and its first title. It is still in Vienna that Rothschilds are relatively most important.

And Rothschild genealogy is simpler in Vienna than elsewhere. All the living adult Austrian Rothschilds are children of one father, Albert Solomon de Rothschild, grandson of the founder of their house, Solomon, who was Prince Metternich's able collaborator. There were six, one daughter, five sons. Of these, Georg, the eldest, is hopelessly insane and lives in a luxurious private house on the grounds of the state asylum at Mauerohling from which he is allowed to visit his Viennese relations at lucid intervals. The youngest, Oscar, committed suicide in the shadow of the famous *Lusthaus* restaurant in the *Prater*, when old Solomon wearied of his son's amorous eccentricities and forbade him to marry Olga Menn, granddaughter of a Chicago boarding-house keeper. Another brother is devoted to society, another is a naturalized Czechoslovak, which leaves only Louis, shown on left, to carry on the business of S. M. von Rothschild.

He is quite capable of it. Besides managing the family firm, he is President of Oesterrichische-Credit-Anstalt Für Handel und Gewerbe, the largest bank in Austria, which resulted last October from the greatest Rothschild coup in recent history (as related in the introduction to this gallery).

A bachelor, Baron Louis plays polo, like his French cousin Robert, maintains a baroque Viennese palace and a beautiful private park in the suburbs which was open to the public until increased taxation by Vienna's Socialist Government caused him to close it a few months ago. Again in the Rothschild tradition, Baron Louis is heavily intellectual. Every year he makes a solemn pilgrimage to Italy with his tutor, a venerable professor of archeology. In his spare time he directs research in geology, biology and chemistry. Sometimes, as he did this winter, he flies to Africa and shoots lions and elephants.

Wide World

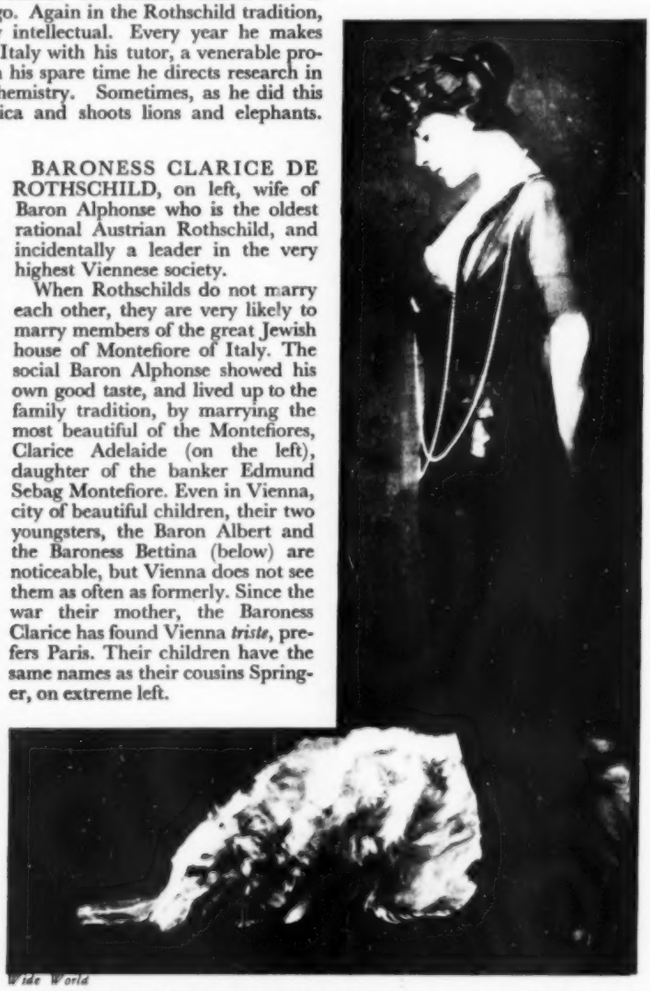
VALENTINE, BARONESS SPRINGER, above, only sister of Baron Louis. Despite appearances, she is not pinching her small daughter, Bettina, in the ribs, but twitching an invisible thread to take this picture, for the Baroness Springer is an enthusiastic amateur photographer and this portrait was not only taken, but developed, retouched and printed in her own studio. She is stone deaf, and cares little for society. Living quietly in a small house on the Metternich Strasse, she reads voraciously, collects paintings of every castle in Austria, and armed with one of her cinema cameras, emerges occasionally for hunting trips in North Africa.

Wide World

BARONESS CLARICE DE ROTHSCHILD, on left, wife of Baron Alphonse who is the oldest rational Austrian Rothschild, and incidentally a leader in the very highest Viennese society.

When Rothschilds do not marry each other, they are very likely to marry members of the great Jewish house of Montefiore of Italy. The social Baron Alphonse showed his own good taste, and lived up to the family tradition, by marrying the most beautiful of the Montefiores, Clarice Adelaide (on the left), daughter of the banker Edmund Sebag Montefiore. Even in Vienna, city of beautiful children, their two youngsters, the Baron Albert and the Baroness Bettina (below) are noticeable, but Vienna does not see them as often as formerly. Since the war their mother, the Baroness Clarice has found Vienna *triste*, prefers Paris. Their children have the same names as their cousins Springer, on extreme left.

Atelier Edith Barakovich



Wide World

BARONESS EUGENE ROTHSCHILD. The shrewd, professional and republican founders of Czechoslovakia did everything that they could to make their country powerful, then for good measure decided that since other European countries had Rothschilds they should have a Rothschild too. Baron Eugene, heavily interested in Czechoslovakian salt mines, offered himself for naturalization as a Czech, and took with him his bride, née Kitty Wolff of Philadelphia, onetime wife of Count Schoenborn of Vienna. They "reside" in Prague, but are usually discovered in Paris.

A TOAST TO YOU FORTUNE

Not just because you're a handsome magazine, admirably illustrated and printed—and engagingly written—but better than that, because you point what happens to be the greatest of all lessons in advertising.

You have taken what are sometimes called "prosaic business" and "sordid industry"—you have viewed them with imagination, insight, and a sense of beauty—and behold, we thrill at the pages you lay before us. No longer is business a column of figures, or work a daily grind. Here is epic enterprise, a panorama of romance, adventure, conquest—with beauty in factories and derricks.

What you, Fortune, are doing for business, advertising should do for the products of business. Planned with insight, executed with inspiration, advertising can make dull, prosaic products as alive and thrilling as you have made the spectacle of business.

There is a little advertising that does this—and much that does not.

You may have sprung from a survey, Fortune, which showed that the world needed a "luxurious" magazine of business. But it wasn't this survey, and it isn't your luxury, that makes you what you are.

It's the transforming touch you've brought to dry facts that has won you public welcome. A toast to you! You're a happy example of the publisher's art—and a pertinent point to a moral.

Young & Rubicam, Incorporated, Advertising, New York, Philadelphia.

Serving the following clients: The Black Flag Company, The Borden Company, Edward G. Budd Manufacturing Co. and Budd Wheel Company, Columbia Phonograph Company, Inc., Devoe & Raynolds Co., Inc., Fels & Co., General Foods Corporation, International Silver Company, Johnson and Johnson, The Norwich Pharmacal Company, Pennsylvania Grade Crude Oil Association, Quaker State Oil Refining Co., Reo Motor Car Company, Rolls-Royce of America, Inc., A. G. Spalding & Bros.

YOUNG & RUBICAM INC.

Transactions

Pullman Moves To Absorb Two Car Companies

Who. Pullman Incorporated, virtual monopolist of travelling beds. In its Pullmans (nearly 10,000) sit and slumber more than 30,000,000 passengers per annum. Founder George Mortimer Pullman died in 1897. The present directorate includes George F. Baker and a contingent from J. P. Morgan & Co. . .

What. Arranged to absorb Standard Steel Car Co. and Standard's affiliate, Osgood Bradley Car Co. In addition to railroad cars (passenger and freight) and a general line of iron and steel products, Standard Steel at one time made an automobile, the *Standard Eight*, long discontinued. To the Pittsburgh Railways Co. (street cars) Osgood Bradley last year delivered an aluminum street car. The Morgan interest in Pullman is balanced by the Mellon interest in Standard. Merger plans provided that Richard K. Mellon should become Director of Pullman Incorporated and that J. F. Drake, President of Standard Steel, should become Chairman of Pullman Incorporated . . .

Why. In addition to its carrier service, Pullman Incorporated, through a manufacturing subsidiary, also makes and sells railroad passenger and freight cars. The Standard merger will strengthen its position in this field, will diversify its products and will bring to one corporate unit an alliance of Morgan and Mellon financial strength.

United Fruit Buys Cuyamel Fruit Co.

Who. The United Fruit Co., largest Central American landowner (2,000,000 acres in Colombia, Costa Rica, Guatemala, Honduras, Panama, Canary Islands, Jamaica, Nicaragua, England, France and the United States), largest fruit shipper (97 steamships in "The Great White Fleet"), largest United States banana importer (more than thirty million stems annually with about a hundred and thirty bananas on each stem) . . .

What. Approved an exchange of U. F. C. shares for the assets of the Cuyamel Fruit Co., second largest, with big banana plantations in Honduras, home office in New Orleans . . .

Why. Because aggressive U. F. C. selling methods have caused a demand greater than their supply, while Cuyamel plantation improvements have caused a supply greater than demand.

$25,000,000 MERGER OF TIN SMELTING COS. FORMING IN LONDON

Who. The Patino (Bolivian) tin interests, the Anglo-Oriental (Straits Settlements) group, and members of the new Tin Producers' Association . . .

What. Formed a holding company to take over four great British smelting companies, whose president will be Simon I. Patino, whose directors will include Sir Philip Cunliffe-Lister and John H. C. E. Howeson . . .

Why. To represent about half of the world's tin supply and, by bringing producers and smelters into closer contact, to make stabilization of the industry easier.

Carbon Black Makers Form Export Group

Who. Representatives of companies producing more than 92% of the world's carbon black, including the United Carbon Co., the Godfrey L. Cabot companies, Columbian Carbon, Electric Bond & Share . . .

What. Formed the Carbon Black Export Association, Inc. Carbon black is a pigment made by playing a natural gas flame against metal. While its largest (volume) service is to strengthen rubber used in tires, its largest (importance) service lies in making new inks. A single pound mixed with oil will print 20,000 newspaper pages. The chief region of production is Texas where the oil industry cannot market all the natural gas it produces . . .

Why. To promote carbon black sales abroad. Exports of carbon black for 1929 are estimated at 100,000,000 pounds, valued at about 10¢ a pound. Such combinations, permitted for *foreign* marketing, would be held violations of anti-trust laws if formed for *domestic* marketing.

15-DAY PERIOD NETS GARDEN $501,000

Who. Madison Square Garden Corp., Manhattan entertainment enterprise specializing in prize fight promotion. Directorate includes Kermit Roosevelt, Richard F. Hoyt, Walter P. Chrysler, Matthew Chauncey Brush and John Ringling. Death of President George L. (Tex) Rickard and retirement of Chief Attraction William Harrison Dempsey have adversely affected earnings . . .

What. Rejoiced in record gate receipts from December 1-15, as follows:

Dec. 1-7 Six Day Bicycle Race	$220,000
Dec. 8 Hockey, Rangers v. Pittsburgh . . .	24,000
Dec. 9 Boxing, Von Porat v. Scott . .	92,000
Dec. 10 Hockey, Americans v. Toronto . . .	11,000
Dec. 12 Hockey, Rangers v. Canadiens .	20,000
Dec. 13 Boxing, Goldstein v. McLarnin .	107,000
Dec. 15 Hockey, Americans v. Boston . .	27,000
Total (record for fortnight)	$501,000

Cuckoo Clock Makers Merge To Push German Product

Who. German manufacturers of Black Forest cuckoo clocks . . .

What. Have entered into a cuckoo clock cartel with price-fixing, a standard trade-mark and an advertising campaign . . .

Why. To improve conditions in the cuckoo clock industry.

MUSIC PUBLISHERS JOIN RADIO CHAIN

Who. Radio Corp. of America, under whose patents 90% of American radios are made and whose interests include, in addition to radio, wireless communication, talking cinema production and mechanism, vaudeville and cinema theatres and phonographs; headed by Owen D. Young, managed by David Sarnoff . . .

What. Announced the formation of Radio Music Corp., incorporators being National Broadcasting Co. (50% owned by Radio Corp.), Carl Fischer, and Leo Feist, Inc., leading publishers, respectively, of classical and semi-classical and of popular (jazz) music . . .

Why. To control raw material (i.e. songs and song writers) for use in broadcasting and in cinema theme songs. Official purpose announced as education of public taste to an appreciation of better-than-jazz music.

BIG BOSTON BANK MERGER CONSUMMATED

Who. The First National Bank of Boston and the Old Colony Trust Co. Old Colony was founded by Jefferson Coolidge in 1890, is identified through its directors with such companies as General Electric, Amoskeag Manufacturing, Pepperell Manufacturing, New England Mutual Life. While Old Colony has conservatively confined its interests to New England, First National has aggressively spread the sphere of its First National Corp. as far west as St. Louis. Companies identified with First National include United Fruit, American Woolen, United Shoe . . .

What. Exchanged stock, First National becoming trustee for Old Colony stock. Old Colony continues its trust business, but is now owned by First National Shareholders.

13-Month Calendar Adopted for 1930 by Sears-Roebuck

Who. Sears, Roebuck & Co., Chicago mail order house which annually distributes $440,000,000 in merchandise to 12,000,000 purchasers and sends out catalogs, describing some 40,000 different articles . . .

What. Decided to begin the year 1930 on the year's first Thursday, then to divide the year into 13 months of 28 days each. The arrangement is purely internal, will not affect customers, will concern chiefly Sears, Roebuck bookkeeping and paydays . . .

Why. To give the new calendar a year's trial to "determine its value in the business world." Several hundred other American firms have also adopted the 13-month calendar, of which George Eastman (Eastman Kodak) is the leading exponent.

[*Continued on page 112*]

When the jury's picked, will they be picking on you?

HAVE you ever had to face twelve of your fellow citizens while the Plaintiff's Attorney presented the Evidence from the other fellow's point of view?

True, your version of the Collision may sound perfectly plausible, but when the Law shakes its finger, the verdict may also shake the dollars out of your bank account—and the happiness out of your home! Jury awards run $10,000, $25,000—even $100,000!

The ÆTNA Combination Automobile Insurance Policy is the most comprehensive form of automobile protection ever offered to motorists.

It protects you *all ways—always!* Includes: Public Liability, Property Damage, Collision, Fire, Theft, Plate Glass, Explosion, Tornado, Water, etc. But the special advantage of this ÆTNA Combination Automobile Policy is that it also includes the complete coast-to-coast service of the great ÆTNA family. 20,000 representatives from Maine to California. A "friend in deed" wherever you may be!

The ÆTNA-IZER in your community is a man worth knowing. Look him up to-day!

The ÆTNA Life Group consists of the ÆTNA Life Insurance Company The ÆTNA Casualty and Surety Company The Automobile Insurance Company The Standard Fire Insurance Company of Hartford, Connecticut.

ÆTNA

ÆTNA-IZE

SEE THE ÆTNA-IZER IN YOUR COMMUNITY — HE IS A MAN WORTH KNOWING

Burroughs

TYPEWRITER BILLING MACHINE

Writes and computes the complete invoice as one operation—including all typing, extending, discounting, totaling. The only billing machine that performs direct multiplication.

Burroughs Adding Machine Company, Detroit

Markets

Post-panic Speculation

(FORTUNE *asked Mr. Franz Schneider, Jr., financial editor of the New York* Sun *and author of several important articles on the money and credit situation, to write a critique of speculation in the light of the market break.*)

SUFFICIENT time has now elapsed since the stock market panic to put that event and its antecedents in perspective and to permit us to see the principal factors involved in their true proportions. We now see, for example, that the stock market did not break until after it had been definitely established that business had turned down. We see that things would have been much better if business had slackened after a spring peak instead of going on to an abnormal summer climax; and if the Federal Reserve Board had not vetoed the advance in discount rate that the Federal Reserve Bank in New York wished to make during spring and summer. We realize that the stock market liquidation was a natural consequence of the culmination of an upswing in business that was allowed to run too fast and too far, and that the inadequacy of the Stock Exchange ticker system helped to exaggerate the liquidation into a panic. We also understand that the extraordinary industrial activity and profits of the first half-year created a feeling of over-confidence that stimulated speculation and brought a reckless boom in investment trusts. We see that overissue of new stocks and bonds created a large volume of undigested securities. And sufficient time has passed for us to see that substantial progress has been made in liquidating the redundancies that accumulated and in preparing the way for a fresh period of prosperity.

Perhaps the present time of comparative quiet is a good one in which to clarify our thoughts on the subject of speculation. Properly engaged in, speculation performs a useful economic function and is ethically justifiable. Under other circumstances it becomes a destructive vice. The economic service performed by speculation is assumption of the risk-bearing function. Risks are as inevitable to business as passage of time. The future cannot be foretold with certainty and the manufacturer who is coverting raw materials or the business man who is merchandizing goods may find his compensation for service rendered wiped out by fluctuations in prices over which he has no control. The speculator, in economic theory, is a specialist in judging future values, and one who takes over and bears this risk for the producer, converter or distributor. The activity of speculators, according to economic theory, tends to smooth out fluctuations in values and to stabilize markets. It also helps to provide continuous markets in which others may buy and sell and also to establish prices that serve as guides to business men and as the basis for banking operations.

But, it will be objected, have we not just seen speculation overstimulating the rise of prices and so exaggerating instead of damping down the fluctuations? And in that event, what becomes of the theory as to the economic value of speculation? The answer is that speculation can be indulged in by the wrong kind of persons; and that when the wrong kind of persons attempt to speculate their activity degenerates into mere gambling.

Nearly twenty years ago Professor Emery of Yale prepared an excellent short essay on the ethics of speculation in which he divided speculators into three classes. He approved of the professional speculator of large means; and he also countenanced speculative activity by professional or business men with the important provisos that their speculations be moderate in proportion to their resources and that the speculations must not distract them from full performance of their primary duties. But in a third class he placed the great group of small "get rich quick" individuals who have neither the resource nor the character to assume the risk-bearing function. The activity of these individuals serves no economic purpose, and, because of the unwisdom of these operations, tends to exaggerate the fluctuations in prices. Properly speaking, these individuals are not speculators but gamblers. And their gambling inevitably injures the value of their normal services to the community.

Ethics of the Broker

The recent collapse undoubtedly has done a great deal to reduce the number of stock market gamblers, at least for the time being. But there remains a practical and ethical question for brokers to consider. The Stock Exchange has developed a tremendous market in securities by extending its ticker system all over the country and by listing a multitude of stocks for trading purposes. Speculation has been made very easy. And the transition to gambling also has been made very easy. Professor Emery pointed out that the conscientious broker should want to know whether his customer really can afford to trade, and on the scale attempted. No doubt there are many brokers who do exercise care in accepting accounts and who discourage overtrading. On the other hand, there certainly are other brokers whose only requirement for opening a margin account is that the customer be able to lay down a certain amount of cash; and who, having in mind "overhead" and the fact that earnings come from commissions, like to see "turnover" in customers' accounts, and who stimulate it with "tips". While the implications of this sort of thing are in the first instance ethical, they also have their very practical aspects, because to the extent that stock exchange activity degenerates into gambling by those not fitted to assume the risk-bearing function, to that extent will it invite interference and restriction by legislative authority.

Bonbright & Co., Inc.

(*In this department* FORTUNE *will print, at frequent intervals, brief descriptions of the country's chief investment houses and the companies whose securities they have underwritten.*)

What is Bonbright?

THE house of Bonbright & Company, Inc., 25 Nassau St., Manhattan, specializes in the securities of public utility operating, holding and management companies. Since public utility companies, rapidly expanding, have absorbed during the last six years more than a billion dollars a year of new capital, Bonbright & Co. has become powerful and prosperous. During the 1924-29 period, indeed, this company, either alone or with associates underwrote utility securities in the amount of $1,600,000,000, which was 15% of all the utility financing undertaken throughout the United States.

Nor has Bonbright been content merely to reap commissions from its services. The principal financing institution of the electric light and power industry, Bonbright has also become one of the industry's most effective and persuasive spokesmen. While the extraordinary integration of the utility systems focuses the attention of press, public and congress, Bonbright has undertaken to explain and interpret. To do this, it has gone to great effort and expense. The Bonbright survey of U. S. power and light companies is a standard utility text-book; together with the N. E. L. A., Bonbright has supplied the industry with its most exhaustive research on the intricacies of utility regulation. Armed with these visible signs of its enterprise and its enthusiasm, Bonbright has become not only the industry's banker, not only its spokesman, but to some extent its guide. Thus it is that some utility men consider Messrs. Thorne and Loomis, Bonbright's president and senior vice president, as the most potent forces in shaping the present and future organization of America's huge, complex power and light business.

Where is Bonbright?

It would be possible to answer this question, loosely: "At the right hand of Sidney Zollicoffer Mitchell". For it is true that from 1912 to the time of the Bonbright reorganization in 1920, Bonbright's most profitable activity was to market the securities of Electric Bond & Share, that vast holding company inspired by the General Electric Co. and now presided over by Mr. Mitchell. And it is also true that in the more recent financing of Electric Bond & Share and its many affiliates, Bonbright has found some of its most useful and important work. Specifically, the companies of the EBASCO group for which Bonbright has done its most representative financing, follow (American Gas and Electric Co., once closely affiliated with EBASCO, now practically independent of the group, is omitted from

[*Continued on page 112*]

XUM

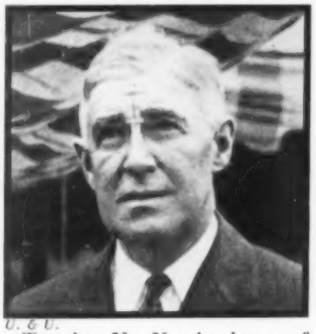
Faces of

William H. Williams was the hero of the I. C. C. Plan. He is Chairman of the Wabash and the Missouri Pacific, proposed systems which together span the continent.

Radio history was made when the Washington journalist, William Hard, broadcast from London to the U. S. a day-by-day account of the naval parley.

Keystone

As newly chosen (for second time) Chairman of the Guaranty Trust Co., Charles H. Sabin heads a bank which this year joins National City in the $2,000,000,000 class.



U. & U.

To the N. Y. Academy of Medicine Dr. Walter L. Niles read a challenging annual report. One "glaring" abuse cited: Overcharging of patients of small means.

C. C. Cook

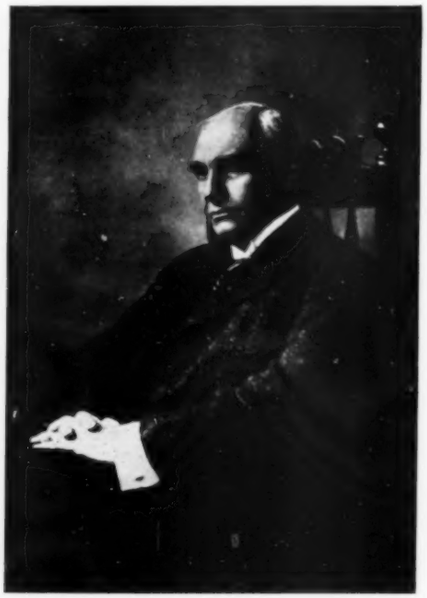
At New Orleans on the second day of 1930, Zoom, son of Pennant, won the initial Harry Payne Whitney victory of the year. In 1929 the Whitney horses won for their master approximately $363,000, winnings which top those of any other owner. To help his horses do as well this year, Mr. Whitney has engaged as trainer Thomas J. Healey, for 37 years trainer for the late Richard T. Wilson.

International

Most famous of faces is that of King C. Gillette, which travels on razor blade packages to the ends of the earth. His company will build a large factory in Russia, the first big Soviet concession since the Harriman manganese enterprise was abandoned.

Courtesy Grenfell Mission

Sir Wilfred Grenfell, "The Labrador Doctor", sees his barren domain prospering. He prophesies Labrador harbors for grain ships following the new Hudson Bay route, and he plans a ranch to supply civilization with reindeer steaks and chops.



John Sanford has merged his ancestral carpet mills with Bigelow-Hartford Carpet Co. to form Bigelow-Sanford Carpet Co., Inc. Horses are his hobby (at Amsterdam, N. Y., are both his stables and his carpet mills), and poloist "Laddie" Sanford (7 goals) is his son.

the Month

International

For a vital part of its sales volume, General Motors looks to its 9,000 dealers in 110 foreign countries, and especially to their commander, James D. Mooney, President of General Motors Export Co. (*above with wife*). In his campaigns abroad Commander Mooney will have as powerful ally the recently-bought Opel Works in Germany. Their heir apparent, young Fritz von Opel, of rocket-car fame, has arrived in this country to study for a year U. S. methods of automobile making (*below with wife*).

U. & U.

Keystone

International

On the New Year's good books in England: Sir Charles Cheers Wakefield (left) genial oil importer and backer of British aviation exploits, whom the New Year's Honors List makes a Baron. *On the New Year's bad books:* Lord Kylsant (right), head of the unprosperous Royal Mail lines (White Star, Union Castle, etc.), who orders expansion, whose salary is believed to be computed on the gross income of his company.

Wide World

To Louis C. Delisle, Head Chef Emeritus of the Campbell Soup Co., has come a reward for his 27 years of expert soupmaking: the cross of the Chevalier du Merite, Agricole, from France.

International

Colonel Harry Burgess, Governor of the Panama Canal, reports for 1929 record tolls of $27,592,000. For the fiscal year 1929, net revenues were $18,467,000, not yet 4% on the capital investment.

(*Continued from page 109*)
this list of EBASCO companies:

Holding Companies
American Power and Light
(gross revenue, last 12 months)
$87,636,155
Operating Companies
Florida Power & Light Co.
Southwestern Power & Light Co.
Texas Power & Light Co.

Electric Power & Light
(gross revenue, last 12 months)
$57,385,076
New Orleans Public Service, Inc.

National Power & Light
(gross revenue, last 12 months)
$80,560,029
Carolina Power & Light Co.
Lehigh Power Securities Corp.

But in spite of this close and profitable association, it would be not only loose but incorrect to tie the house of Bonbright to the success of any one man, any one group. Bonbright is historically more indebted, but currently and actually no more linked to Mr. Mitchell and EBASCO than to Mr. Samuel Insull and his group. Of the Insull utilities group, Bonbright has helped finance these units:

Holding Company
Middle West Utilities Co.
(gross revenue, last 12 months)
$152,179,830
Operating Companies
Kansas Electric Power Co.
Penn Central Light & Power Co.

Or to that notable Cleveland financier and unifier of steel companies (see page 114), Mr. Cyrus S. Eaton:

Holding Company
United Light and Power
(gross revenue, last 12 months)
$94,635,311
Operating Companies
United Light and Railways
Columbia Railway Power & Light
Kansas City Power & Light

Or, though in somewhat less degree, to Mr. Thomas N. McCarter.

Holding Company
Public Service Corp. of New Jersey
(gross revenue, last 12 months)
$135,065,230
Operating Company
Public Service Electric and Gas Co.

And it would be possible to extend the list at length. Bonbright has played a very minor role in financing Cities Service Co. (Henry L. Doherty, president) and the Japanese systems (Tokyo Electric Light Co., Ltd.; Great Consolidated Electric Power Co., Ltd.); it has played a large part in America Gas and Power (Mr. Frank T. Hulswit's gas holding company). In 1927, for the newly-formed New York Power and Light (Niagara-Hudson River system) it brought out the largest single issue in the history of utility financing: $66,000,000 first mortgage 4½s. Bonbright has no dealings with Associated Gas & Electric Co., the company which operates through northeastern states, whose territory extends southwest through Kentucky, and which is headed by Mr. Howard C. Hopson.

Bonbright's enterprise last year linked three important holding companies into a new group, now known as Commonwealth & Southern Corporation. Last month, the link became a merger. For this group, which is more peculiarly Bonbright's own child than any of the other systems for which it acts as banker and researcher, the house has done much important work:

Holding Companies
(consolidated gross revenue of the parent company for the last 12 months was $151,404,677)
Commonwealth Power Corp.
Operating Companies
Consumers Power Co.
Tennessee Electric Power Co.

Penn-Ohio Edison Co.
Ohio River Edison Co.
Pennsylvania-Ohio Power & Light Co.
Pennsylvania Power Co.

Southeastern Power & Light Co.
Alabama Power Co.
Georgia Power Co.
Gulf Power Co.
South Carolina Power Co.

Commonwealth & Southern Corp., holding more than 95% of the common stocks of these companies, is itself an important item among the investments of American Superpower Corp., the last Bonbright interest this article will consider. When Bonbright formed American Superpower in 1923, it brought together the chiefs of the great systems. Out of this association was born (Jan. 1929) the United Corp. (projected by Messrs. Thorne and Loomis; identified with J. P. Morgan & Co.) and upon the model of the United Corp. was created (May 1929) Commonwealth & Southern Corporation. American Superpower, reporting to stock holders last December, announced that more than half its holdings were concentrated in United Corp. and Commonwealth & Southern.

Who is Bonbright?

Founders William P. and Irving W. Bonbright liquidated their interests in 1920. Important Bonbright personages of the present are: President Landon Ketchum Thorne (also President of American Superpower Corp.); Senior Vice President Alfred Lee Loomis; Vice President Horace S. Scarritt (in charge of marketing and distributing Bonbright issues); Vice President George Roberts (Bonbright's legal chief); Vice President Sidney A. Mitchell, able son of an able father, now an increasingly important factor in the councils of the Electric Bond & Share group; Vice President Pearson Winslow (expert on contracts, indentures and complicated negotiations generally). Of this active vigorous sextet, each one a Yale graduate, President Thorne and Vice President Loomis are perhaps

[*Continued on page 162*]

Transactions

TWO THEATRE MEN BALK IN SCALPER WAR

Who. Thirty-four New York theatre managers, controlling 58 of New York's 64 legitimate theatres in the Broadway district, approved an anti-ticket-speculator plan reached by Managers' Committeemen Arthur Hopkins, Brock Pemberton and Gilbert Miller. But A. L. Erlanger (5 theatres) and C. B. Dillingham (1 theatre) saw no merit in the Committee plan . . .

What. The plan provided that theatre managers, instead of selling to ticket brokers large blocks of seats far in advance, will make such sales on consignment only, retaining ownership of the tickets, specifying a markup of not more than 75¢ over the box office price, and taking back unsold seats. It also pledged managers to keep at the box office an ample ticket supply . . .

Why. With tickets peculators selling $4.40 tickets to a successful show for up to $13.20, managers felt that in turning over a large percentage of their ticket sales to a middleman, and in losing all control of the resale price, an economically unsound and ridiculous system of distribution had been developed.

THE HOTEL CECIL

SALE TO SHELL-MEX, LIMITED

Who. Named for Cecil Rhodes, owned by the Duke of Westminster, fronting on the Strand and on Victoria Embankment (with a view of the Thames and Cleopatra's Needle), the Hotel Cecil was for many years a favored meeting-place for smartest London . . .

What. The Cecil was purchased by Shell-Mex., Ltd., subsidiary of Sir Henry Deterding's Royal Dutch-Shell petroleum company, and will be converted into an office building.

Why. Said the London *Times:* "Generally speaking, hotel policy favours the provision of wholly modern accommodation. The public taste in hotel matters has undergone a great change, and to adapt existing buildings of the older type to current requirements is almost prohibitive in cost, and structurally very difficult . . . The value of the Victoria Embankment frontage for first-rate offices has always been recognized and if the Hotel Cecil, which, with the Savoy Hotel, has occupied so much of the river front, is converted to such uses, very little of river frontage will remain for similar development."

STUTZ HEAD DENIES FIRM IS INSOLVENT

Who. Stutz Motor Car Company of America, Inc., builders of Stutz and Black Hawk automobiles. Stutz green bug racing cars were familiar as long ago as 1912. The company's most spectacular period came in 1920, when Allen A. Ryan, son of the late Thomas Fortune Ryan (the son's legacy, from a $500,000,000 fortune was a pair of shirt studs) cornered Stutz, sending the stock to $724 a share. Stutz stock closed 1929 at about $1.50 a share . . .

What. A United States District Judge in an Indianapolis court dismissed a petition in involuntary bankruptcy filed against Stutz by three Indianapolis creditors . . .

Why. "I want to say," said Stutz President E. S. Gorrell, "that I am thoroughly disgusted with the way the Stutz Motor Car Company has been treated by citizens of the town [Indianapolis] to which it has always looked for its strongest support." Mr. Gorrell said that he was conferring with another automobile company concerning a merger when news of the bankruptcy suit spoiled the contemplated deal. He added that filing of the petition had cost the Stutz company $2,000,000 in public confidence.

[*Continued on page 114*]

A New Era In Industrial Building

FORTUNE Magazine inaugurates a new era in publishing. Austin inaugurates a new era in design and construction of industrial plants.

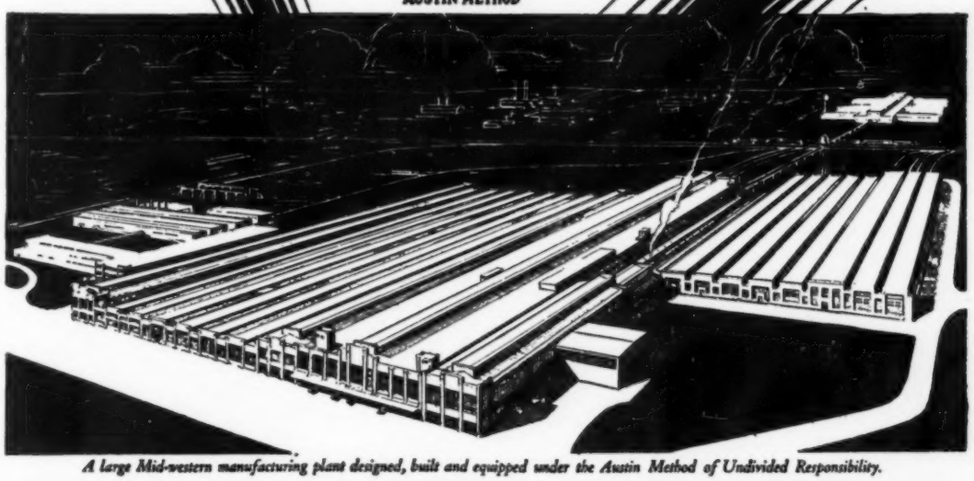
The Austin Method of Building is like straight line production in manufacturing. Embracing the complete project—design, construction and building equipment—it begins at one end and goes right through to the completed product, ready for delivery to the customer, in the shortest possible time.

It eliminates delays, backtracking, extra handling, waste, unnecessary labor or overhead of any kind. It is the application of the most advanced production methods to big, complicated building projects.

This nation-wide organization, with specialized engineering experience in many different industries, furnishes this exceptional service anywhere, guaranteeing in advance the total cost, completion date and high quality of materials and workmanship. Scores of the nation's industrial leaders have employed the Austin Method to their complete satisfaction.

Large companies contemplating new main plant projects, branch plants, warehouses, revamping or extension of present facilities, will find it worth while to get in touch with Austin. Phone the nearest office, wire or write.

THE AUSTIN METHOD



A large Mid-western manufacturing plant designed, built and equipped under the Austin Method of Undivided Responsibility.

THE AUSTIN COMPANY

Engineers and Builders • Cleveland

New York Chicago Philadelphia Newark Detroit Cincinnati Pittsburgh St. Louis Seattle
Portland Phoenix The Austin Company of California Ltd.: Los Angeles, Oakland and San Francisco
The Austin Company of Texas: Dallas The Austin Company of Canada, Limited

CHILDS TO FORM ANOTHER CHAIN

Who. William Childs ("Meats for the Meat Eater"; "Fruits, Cereals, Fresh Vegetables, Dairy Products for Health and Economy"); co-founder of the Childs restaurant chain ("The Nation's Host from Coast to Coast"); ousted from control in March, 1929 ("This is the child of my efforts. . . . You cannot tell what will happen when you take this child away") . . .

What. Planned a new restaurant chain, to begin with the old Archambault, Broadway and 102nd St., Manhattan. He could not, of course, use the Childs name, property of the Childs Corporation . . .

Why. Presumably to vindicate the soundness of his methods and policies.

U. S. STEEL MAY PURCHASE ATLAS

Who. The United States Steel Corporation . . .

What. Offered to buy the Atlas Portland Cement Co. Consideration: 180,000 shares of U. S. Steel common, currently valued at about $29,340,000. Atlas Portland Cement and Universal Portland Cement (the cement subsidiary of the Steel Company) are two of the country's four largest cement producers, together will make U. S. Steel largest producer with capacity of 36,500,000 barrels a year . . .

Why. To help stabilize cement industry (allied with steel in building), now disorganized through competition, price-cutting.

AUSTRALIAN PLANT FOR KAYSER & CO.

Who. Julius Kayser & Co., manufacturer and seller of full-fashioned silk hosiery; silk, woolen and fabric gloves; silk and cotton ribbed underwear . . .

What. Will build in Melbourne, Australia, a plant with an annual capacity of 100,000 dozen full-fashioned silk stockings . . .

Why. Because 60% of all imported-hose-clad Australian legs use Kayser brands; because the Commonwealth of Australia recently placed a tariff of $12.20 a dozen on imported hosiery; because by making its hosiery in Australia, Kayser & Co. will continue to supply its customers, and benefit from the protective tariff.

R. T. KANE TO MAKE TALKIES IN FRENCH

Who. Robert T. Kane, Hollywood producer and former production manager for Paramount . . .

What. Announced the formation of a Franco-American cinema company, with $10,000,000 backing, to make French talking pictures in Paris . . .

Why. Because American-made talking pictures, English-speaking, have a novelty value but are relatively unintelligible to French audiences, even with the generous addition of French explanatory titles.

U. P., AGAINST WILL, MUST BUILD LINE

Who. The Interstate Commerce Commission—11 governmental commissioners, appointed by the President, ratified by the Senate, charged with seeing that the railroads of the country conduct themselves in accordance with the public weal . . .

What. Ordered the Oregon-Washington Railroad & Navigation Company (a subsidiary of the Union Pacific railroad) to build, against its will, a 185-mile line between Crane, Oregon and Crescent Lake, Oregon, at an estimated cost of $9,000,000 . . .

Why. The order was requested by the Oregon Public Service Commission which maintained that the proposed line would open up a rich district in the foothills of the Cascade Mountains. Railroad men argued that such a line would be economically unsound. Significant issues: has the Interstate Commerce Commission the authority to compel a railroad to build, against its will, a line which it considers expensive and unprofitable? Almost immediately after this ruling came publication of the Commission's so-called Final Plan, dividing the country into 21 railroad systems.

HUGE STEEL MERGER IN THE MIDDLE WEST LINKS $350,000,000

Who. Cyrus Stephen Eaton, Canadian-born (Pugwash, Nova Scotia) naturalized citizen of the United States (1913); partner of Otis & Co., Cleveland financing house; ally of Cleveland's Mather and Hanna long-established iron and steel interests; organizer of utility and steel combinations; a 46-year-old multi-millionaire; the *Mellon of Ohio.* Arriving in Cleveland in 1907 (originally with aspirations toward the Baptist ministry), Mr. Eaton soon became interested in utilities—specifically, in Cleveland street railways. Later he went to Iowa, bought up options on utility companies, through one of these Iowa financings made his first connection with Otis & Co. In 1912 he organized Continental Gas & Electric, pioneer among utility holding companies. His fame in the steel business began in 1925 when he entered a meeting of harassed and money-seeking Trumbull Steel Co. directors, and laid before them a check for $20,000,000 . . .

What. Forged the Republic Steel Co., third largest steel company in the United States. Constituents: Republic Iron & Steel Co., well-integrated steel unit which last year acquired Trumbull Steel and Steel & Tubes, Inc., Central Alloy Steel Corp., leading producer of steel alloys and licensee of Krupp Works in the making of the newly developed stainless (nirosta) steel, Donner Steel Co., Bourne-Fuller Co., and Trumbull Cliffs Furnace Co. The new Republic company has assets of $350,000,000; sales of $250,000,000; ingot capacity of 4,900,000 tons. Leading steel companies (ingot capacity) become:

United States Steel .	20,105,749
Bethlehem . . .	8,000,000
Republic	4,900,000
Jones & Laughlin. .	3,270,000
Youngstown Sheet & Tube	3,000,000

As Mr. Eaton controls large holdings in Youngstown Sheet & Tube and in the Inland Steel Co., it was considered possible that these two companies would later be merged with Republic Steel Co., a combination which would have an ingot production of about 10,000,000 tons and replace Bethlehem as second largest steel company . . .

Why. The Republic merger was officially explained as an attempt to stabilize the steel industry. But those who saw in it a forerunner of other Eaton-inspired steel mergers considered that Mr. Eaton was laying the foundation of a steel structure which might eventually rise even to those heights now reached only by the United States Steel Corporation itself. Also, the larger the company, the more it will cheerfully spend on expensive technical research.

CAN, THERMOKEPT IN BRITISH FIELD

Who. The British Can Co., representing a union of British Shareholders Trust, Ltd., the Thermokept Corp., and American Can Co., largest U. S. can-maker, whose profits are about $20,000,000 per annum. American members of the directorate included H. W. Phelps and Harry Craver, president and vice president of American Can, and George K. Morrow, of Gold Dust and United Cigars . . .

What. Equipped itself to make all kinds of cans, using patents and processes of American Can Co. and Thermokept Corp. . . .

Why. "It marks a long stride in the manufacture of tin cans in the British Isles."

ZINC CARTEL TO END AFTER DIFFERENCES

Who. The international zinc cartel, in which American interests participated, and which was regarded as one of the strongest examples of the European post-war cartel movement. . .

What. Agreed to its demise, by failing to renew the convention which expired Dec. 31 . . .

Why. Because of lack of prosperity, resulting from world-wide overproduction of zinc (the biggest mining areas being the United States, Mexico and Australia), and internal dissension. European members objected to American (including Canadian and Mexican) zinc shipments to Europe; American members disapproved request of Norway and other European zinc producers for enlargement of quota.

A Banking Merger
of National Significance

THE FIRST NATIONAL BANK *of* BOSTON and OLD COLONY TRUST COMPANY have merged forming a banking institution which ranks among the largest in the United States. The First National Bank of Boston has been preëminent in its territory in the fields of commercial and foreign banking. Old Colony Trust Company has been preëminent in the administration of individual and corporation trust services.

The union of the two provides complete and unexcelled service in every department of modern banking.

Foreign Branches
BUENOS AIRES, ARGENTINA
HAVANA, SANTIAGO, CIENFUEGOS AND SANCTI SPIRITUS, CUBA

Head Office
67 MILK STREET
Boston

European Representatives
LONDON, 24, Old Broad Street
PARIS, 39, Rue Cambon
BERLIN, 52, Unter den Linden

INVESTMENT BANKING

THE FIRST NATIONAL CORPORATION and OLD COLONY CORPORATION have united to form THE FIRST NATIONAL OLD COLONY CORPORATION. It offers to individuals and corporations a complete service of investment through its own offices in leading American cities. Its offices are interconnected by a private wire system providing speed and accuracy in its transactions.

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The FIRST NATIONAL BANK *of* BOSTON

AND ITS AFFILIATES

OLD COLONY TRUST COMPANY

The FIRST NATIONAL OLD COLONY CORPORATION

Combined Capital Assets $115,000,000

A Budget for a $25,000 Income in Chicago

How a tithe cannot be saved. The cost of parties at home and His Implacable Necessity, The Doctor.

BEFORE we were married, Anne and I were certain that when I earned $15,000 a year we could live in regal splendor. That was ten years ago. Today we have two children, and have to check the grocery bills to do it on $25,000.

Here's the situation: my salary is $15,000, and my revenue from securities gives the other $10,000. Clearly we can't talk about what we want to do with our money until we've disposed of the things we *have* to do with it. First, income tax: after making all proper deductions, I have to pay the government about $830. Second, insurance: you'll admit that $1,000 a year is modest, and the same for $2,500 savings. Sound economics would increase the latter from a tenth of our income to a third, but hopes of inheritance have scaled it to the minimum. Taxes, savings, insurance: $20,670 left, and December still twelve months away!

Household

Much the larger half of this $20,670 must go to household expenses, and it does. We hadn't the capital to build a home, our families didn't give us one, and we couldn't afford to run it if they had, what with caretakers, janitors, property taxes and fuel, so we rented an apartment on what real estate agents like to call "the smart North side". $333 a month, $4,000 a year, the building doesn't even have a proper doorman, but presto!—the $25,000 is less than $17,000 before we've had a scrap to eat or a shirt to our backs.

Obviously, somebody's got to cook the scrap and somebody's got to put it on the table, shake up the beds, and break the glasses. Add a nurse for the youngster (our eight-year-old's at the Chicago Latin School, with his tuition cracking $500) and away goes $3,300 for service alone. This may seem high to some of our friends, and of course I suppose Anne could take care of the children herself, but it does seem as if she ought not to have that eternal responsibility, and no hostess may excuse herself properly between soup and nuts to quiet the nursery.

Then the food itself runs to more than $200 a month, not counting the dinner parties at home. It is entirely false to assume that we will be reimbursed for the dinners we give by the dinners we get from others. Food, then, is $2,600 per year, just for ourselves. Mark you, this is allowing only $7 a day to feed seven people! Of course, if Anne fails to count the vegetable and soup cans, and doesn't remind the cook that yesterday's roast is today's hash, the food bills could easily be twice as large. I know that such petty vigilance and economy have come hard to a girl accustomed only to pushing buttons and giving orders, but unless she learns to practice them, she loses an extra opera cloak or a more expensive car. Accordingly, she can hold gas and light bills inside of an annual $300. Perhaps it is too much to expect her to turn out the bedroom light when she goes in for a tub, but she can certainly see that lights don't burn all night in empty rooms.

The same for the telephone: if Anne would swallow her pride and install a nickel-in-the-slot device, she'd not only add considerably to her luxury allowance, but avoid the catastrophe that happened to a friend of ours, who didn't stumble on the sentimental long distance interludes of his lonely parlor maid until they had cost him $100 in a single month. As it is, our phone stands us, together with an occasional telegram or cable to our Europe-doing relatives, about $200 a year.

Six hundred dollars is none too much for laundry, nor is $350 for pressing and cleaning. When you remember that we're trying to keep our end up in the younger married set,

BUDGET FOR A YOUNG MARRIED COUPLE IN CHICAGO SOCIETY

TAXES: (Income, earned $15,000, unearned $10,000)			$ 830.00	
INSURANCE			1,000.00	
SAVINGS			2,500.00	
				$ 4,330.00
HOUSEHOLD EXPENSES:				
Rent			$4,000.00	
Food			2,600.00	
Power, Gas, Light			300.00	
Servants			3,300.00	
Laundry			600.00	
Pressing and Cleaning			350.00	
Upkeep			400.00	
Telephone			200.00	
Miscellaneous			200.00	
				$11,950.00
OTHER NECESSITIES:				
Clothes—for Anne	$1,500.00			
for Children	500.00			
for Me	500.00			
		$2,500.00		
Doctor		500.00		
Dentist		200.00		
School		500.00		
Pocket Money—Anne	200.00			
Me	300.00			
		500.00		
Automobile		750.00		
				$ 4,950.00
GOODWILL:				
Friends		300.00		
Donations		500.00		
Clubs—Dues and Expenses		1,000.00		
Dining		312.00		
Theatres and Subscription Dances		158.00		
Liquor and Tobacco		500.00		
				$ 2,770.00
EMERGENCIES AND LUXURIES:				1,000.00
				$25,000.00

A Train

...*that connects with Twenty Million Homes*

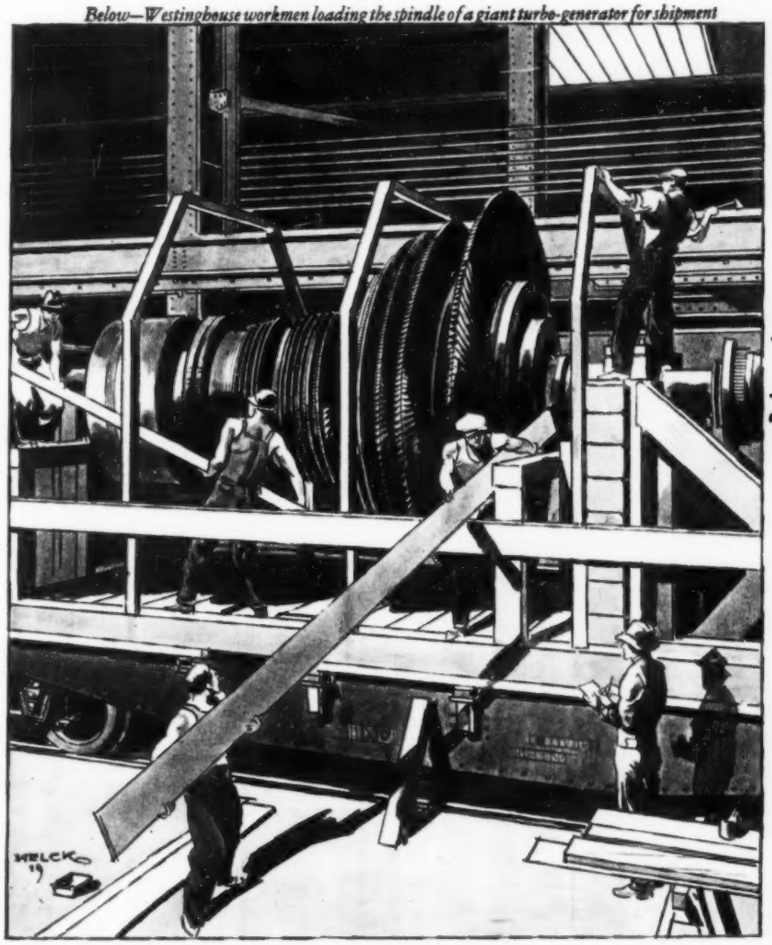
More than a hundred miles of freight cars must ride the rails each year to distribute equipment that Westinghouse manufactures. Electrical products closely connected with the life of the nation's twenty million homes stream out from Westinghouse plants in dozens of car loads every day.

At one loading platform, for instance, you see a group of workmen loading the spindle of a giant turbo-generator. It is being started on its way to flood a distant city's homes with cheerful light.

And so it is with other apparatus. Electric appliances carry new freedom to mothers in homes. Industrial motors help factories to put new convenience in reach of homes everywhere . . . and workmen are helped by means of electrification to increase their earnings and raise their standards of home living.

Whenever you see the sign of a Westinghouse Electrification dealer, you see the signature of a service that is helping electricity to give you more for the time, effort, and money you spend. As electricity does more you can buy more.

Below—Westinghouse workmen loading the spindle of a giant turbo-generator for shipment



Electric power builds buying power

Westinghouse

it's plain that soiled shirts and spotty frocks would lose us more than we'd save. Similarly, $400 goes to put the apartment in shape: waxing floors, new curtains, repapering, and the various things we might argue out of the landlord if life were longer.

Next come the thousand and one little whatnots that drain your pocketbook dime by dime, quarter by quarter, until they finally run into a couple of hundred dollars. I mean the magazines, silver polish, cosmetics, toilet articles, writing materials, and all the rest of their tribe. For instance, a subscription to the Chicago *Tribune* costs $12.50, and there are at least five other publications that you have to take to keep in step. Believe it or not, $200 a year is putting it mildly, and the only way you can do it on less is to grow a beard.

Rent, food, servants, power, laundry, pressing and cleaning, upkeep, telephone, miscellany—the total runs to $11,950 a year, or nearly my entire salary, and, my compliments to Anne, it requires skillful housewifery to do it on that. We are now left with less than $9,000 to provide for all the rest, which includes the ills as well as the amenities of life.

Other necessities

Of the remaining $8,750, at least $500 must be set aside for His Implacable Necessity, The Doctor, and $200 for H.I.N., The Dentist. Our younger child was born four years ago at a total cost of more than $500. A tonsil operation cost, in all, $200; the abstraction of one of our four appendices, $400; and upon a slight astigmatism to which I must personally plead, I have spent some $200 during the last four years. Of course, to some the oculist is a necessity, while the psycho-analyst is a delightful luxury, so that no budgets will be the same. But a touch of flu for father and of croup for baby may be regarded as characteristic of our kind, and these added to the less universal ailments wherein we exhibit our individuality take a remarkably steady toll of $500 from the income of those who do not desire bargains in doctors.

The economics of our little roadster need little examination—$750 per year should take care of it and buy a new one, although it must be confessed it is our pleasure to buy somewhat more frequently than this allowance would literally justify. As to pocket money, both Anne and I realize that more than the allotted $500 dribbles from us, and we suspect that we must win more at bridge than we lose.

To the matter of clothes, we have given serious attention. An ordinarily good New York dressmaker estimated that her clients spent from $2,000 to $7,000 a year on clothes. But many well dressed women spend less. Take Anne, for instance, on her $1,500, and see what she does with it:

Winter suit	$150.00
Afternoon gown	100.00
2 Dark dresses, new or made-over old ones	60.00
Spring or summer suit	90.00
5 Sport dresses @ $30	150.00
2 New evening dresses	$300.00
2 New evening dresses home made or bought at sales	100.00
2 Remodeled evening dresses	50.00
Total:	$1,000.00
Hats, 3 winter and 2 summer	70.00
Shoes—bought only at sales:	
4 prs. evening shoes	50.00
2 prs. heavy shoes	20.00
4 prs. fancy day shoes	40.00
Bedroom slippers, tennis shoes	15.00
Total:	$ 195.00
Stockings at $1.75 a pr., 3 doz.	63.00
Bags, gloves, beads	55.00
Lingerie: As Anne would scorn buying her undergarments off the bargain counters, she has the child's nurse make her chemises and nightgowns at home, the lace for which she begs off the family, who buy it at a reasonable figure in Paris at bargain counters. With crepe de chine at $3.50 a yard, she probably averages . . Luckily, she wears only three pieces of underclothing at any one time.	100.00
Total:	$ 218.00
Grand total:	$1,413.00

With $87 left, she will get a new motor coat if her old one bores her too much; or she may buy brocade and fur for an evening wrap; or a shawl for summer evenings; or have her fur coat made over; or she may deposit it at the savings bank to swell the fund for a new fur coat. By the time she has saved eight hundred dollars, the sealskin coat her uncle gave her for a wedding present will have been remodeled seven times, and it will probably finish its long life keeping the daughter warm when she skates to school.

It amuses Anne to be seen at Madame Lazarre's where nothing costs less than four hundred per garment, but she knows that a hundred dollars on her figure and with her bluff will do almost as well.

Though Anne takes $1,500, I manage on $500, and $500 takes care of the children. My purchases are more or less as follows

10 Day shirts @ $2.00	$ 20.00
2 Evening shirts	10.00
1 white vest	10.00
15 ties @ $2.00	30.00
6 underwear suits	12.00
3 prs. shoes @ $12	36.00
4 hats	30.00
12 prs. socks	12.00
2 suits	200.00
1 coat	$80.00
2 prs. white flannels	30.00
1 sweater	20.00
Miscellaneous	10.00
Total:	$ 500.00

We have thus completed the analysis of all the so-called Necessities, and we find ourselves with $3,770 left for Good Will, Emergencies and Luxuries.

Good Will

Many are the expenses which business happily taught me to classify as Good Will—the things that keep peace on earth and oil in the social machinery. Presents, for example: Anne's birthday, our wedding anniversary, the children's birthdays, Christmas, and other people's weddings. The maids and the elevator boy would be surprised if Anne forgot to put something in their hypothetical stockings. Friends can scarcely be retained with less than a $300 investment. Contributions to our church, to our political party, and such sound civic enterprises as the Field Museum, the Art Institute, the Chicago Historical Society, the Junior League and the Service Club, the tickets to the Harvard Hasty Pudding, the Yale Glee Club, or the Princeton Triangle performances, will barely be covered by $500.

On the less frivolous side, my business requires membership in at least one good lunch club, because there's lots of good will in a good meal, and a ripe cigar may be the straw that breaks a camel's sales resistance.

There was no use in having my name put on the Chicago Club waiting list because it's too hostile to resident non-members for me to ask them in for a bite to eat or a highball. The University Club—$200 dues—is more cordial, while the club we entertain in is the Casino, which this year costs us $270, because of an extra assessment. For health's sake, I can't afford to drop my golf, and Anne likes to play occasionally herself. I find myself paying about $400 a year for this good cause. $1,000 won't take care of all club dues and incidentals.

Whether we dine our guests at home or at the club, the cost averages two dollars per person. Here is Anne's typical dinner for twelve. The food tastes better than at the club, but most of our friends would rather go to parties at the club.

Dinner for twelve:

Appetizers	$ .60
Soup, clear	1.40
Rolls and butter	1.00
Turkey	9.00
Mushroom sauce	.60
Vegetables	3.00
Salad with mould	1.50
Cake	1.00
Ice cream	2.50
Coffee, cream	.40
Extra waitress	3.00
Total (without liquors)	$24.00

Last year we had a hundred and fifty-six guests. This counts ourselves as guests, since

[*Continued on page 162*]

"Sound Sleep is more necessary than exercise or food," says GENE TUNNEY

"I envy Gene Tunney his nerve control more than his strength or agility. On the day before his contests, and on the morning thereof, he was as calm and self-possessed as if nothing unusual were going on," wrote William Lyon Phelps in Delineator for July. And in maintaining this nerve control Gene Tunney considers sleep an important factor.*

SIMMONS, largest makers of beds, springs and mattresses, have developed scientifically the sleep equipment for complete relaxation and healthful sleep —in two price ranges:—Simmons Beautyrest Mattress—hundreds of sensitive coils under thick layers of upholstery, damask covers—$39.50; Ace Box Spring, $42.50; Ace Open Coil Spring, $19.75. The new Deepsleep Mattress—another inner coil mattress at a popular price, $19.95; Deepsleep Box Spring, $27.50; Slumber King Spring, $12.00. The Simmons Company, New York, Chicago, Atlanta, San Francisco.

SIMMONS

BEDS · SPRINGS · MATTRESSES

BERKEY & GAY FURNITURE

The retired world's champion comments on sleep

"WHEN preparing for a competition in which physical endurance and mental alertness are required, sound, undisturbed sleep is more necessary than exercise or food.

"Little exercise, proper diet and lots of sleep are far more beneficial than lots of exercise and food, and little sleep.

"Exercise and digestion consume nerve-energy which is the motive power of the living machine—Man. Sleep and rest are the mediums through which this destroyed nerve-energy is restored.

"A wise athlete when preparing for athletic competition makes it a rule to get ten hours of sleep and rest a night. This long rest after the hard daily grind will completely refresh his nerves and fit him for the next day's grind, gradually conditioning him for the great event —the contest.

"It is my belief that all youths should get at least ten hours of sleep daily. Growing children need as much rest as hard-training athletes, for like the athletes, they are constantly exerting themselves and need a long period of rest and sleep to recover destroyed energy, and thereby enable their growing and developing processes to function in a healthy and normal manner."

• • •

*The Simmons Company, 666 Lakeshore Drive, Chicago, Ill., will send on request a reprint of this article, "Gene Tunney Shows The Way."

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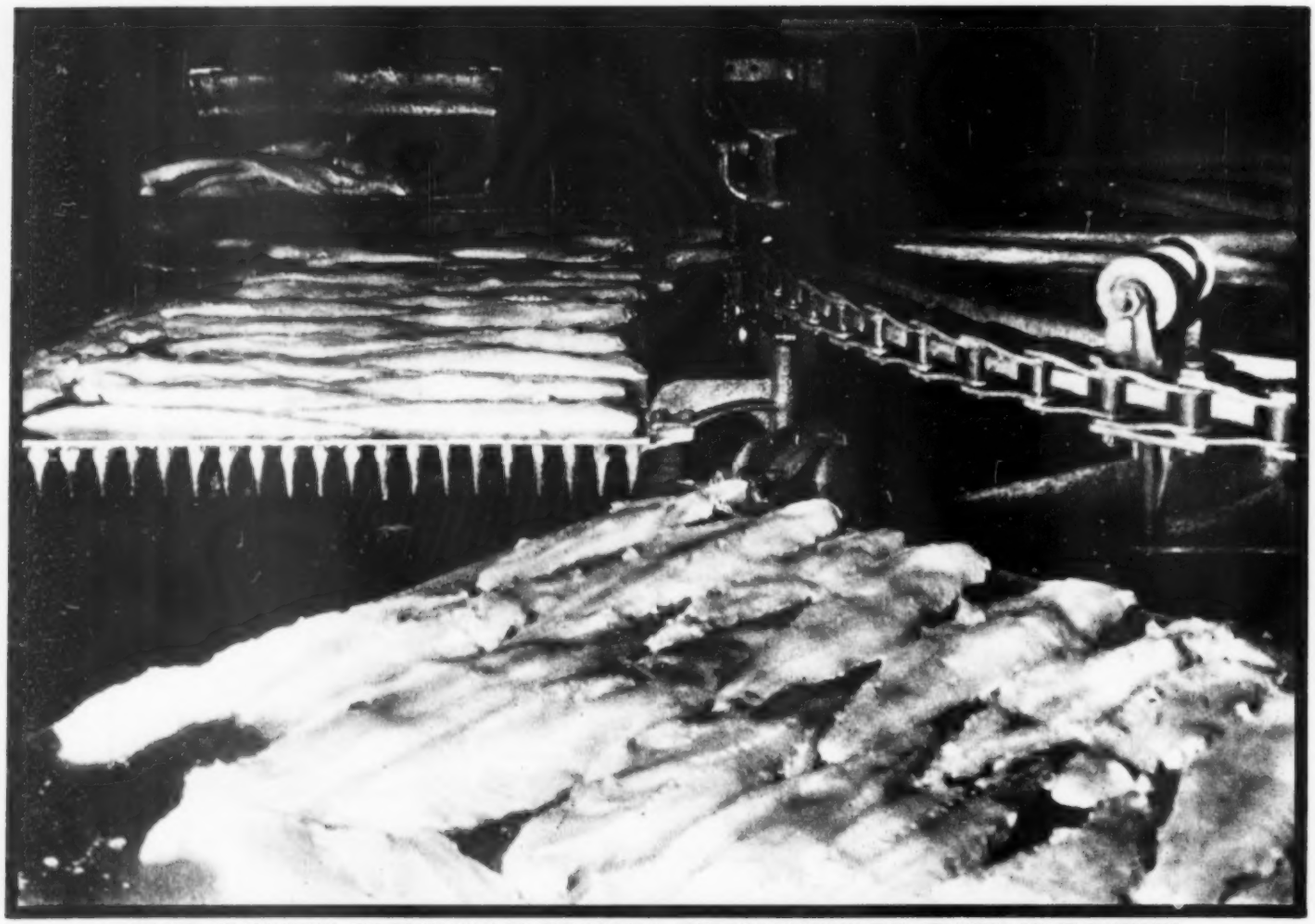


FILLETS OF HADDOCK, ON THEIR WAY TO THE CRYSTAL FREEZING ROOM IN THE ATLANTIC COAST FISHERIES

A Second Ice Age

(Continued from page 62)

The fish industry knows the answer. The meat industry is learning it. The vegetable and berry growers are less puzzled about it than they were. The answer is: by freezing. But not by freezing in the ancient sense; by *freezing with a difference.*

Frozen meats and fish have been handled commercially for a long time—since 1860 at least. In 1927, in the United States, 170 cold storage warehouses froze approximately 125,000,000 lbs. of fish. 700,000,000 lbs. of meat were frozen in the same year. Huge quantities of cold storage meats and fish are eaten annually in the civilized world. And the Metropolitan Purchaser does not like them. She refuses to buy them when she knows what they are. And she is right. For meat and fish frozen in the ordinary way—i.e. "air-frozen" or "slow-frozen" or "sharp-frozen"—deteriorate in the frozen state and on defrosting. They dry out; the fats oxidize; and enzymic (or self-digestive) action occurs. Also large crystals of ice form in the cells, rupturing the walls and permitting the nutritive and flavoring juices to drip away.

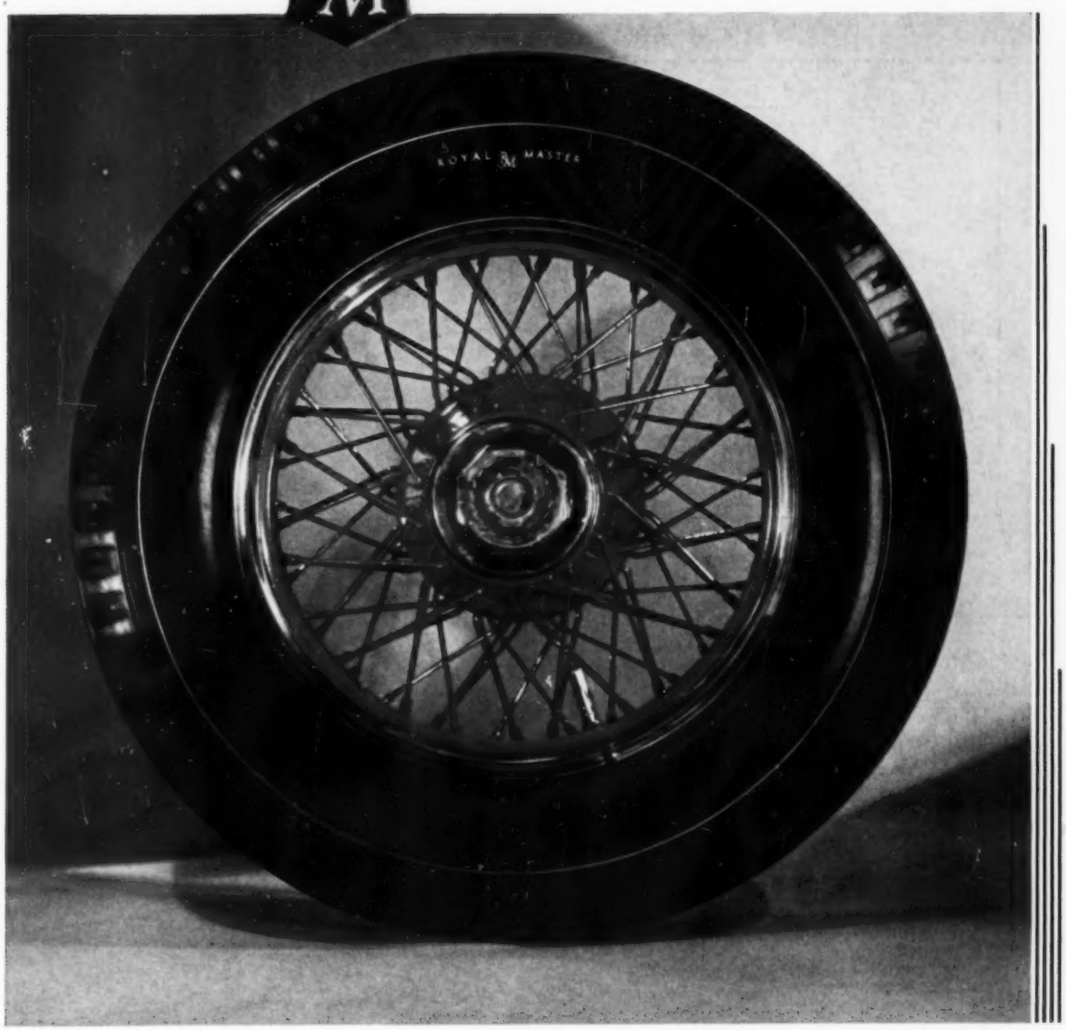
The discovery which enables the fish industry to sell its packaged fillets of fresh fish was the discovery of "quick freezing". Quick freezing means freezing by direct immersion in a liquid refrigerant such as sodium chloride brine or by indirect contact with a very cold liquid refrigerant such as calcium chloride brine. Its effect is to do in approximately one hour what is done in sharp-freezing in from 10 to 48. Since the size of a crystal depends upon the time allowed for it to form, and since, in quick freezing, the flesh to be frozen takes 25 minutes to pass through the zone of maximum crystal formation as against about 350 minutes in sharp freezing, the crystals formed in quick freezing are smaller and will not disrupt the cell tissue. Similarly the more rapid drop of temperature carries the flesh to be frozen more rapidly to the point at which bacterial action is suspended (25° F.), enzymic action stops (15° F.) and oxidation of fats ceases (Zero F.). So far as desiccation is concerned, if the flesh to be frozen is first wrapped in moisture-proof vegetable-fibre parchment, as in the patented Birdseye system used by General Sea Foods Corporation (General Foods) and then boxed and frozen, practically no shrinkage takes place.

There are four quick-freezing systems in common use, all having in common a purpose to eliminate air between the freezing agent and the object to be frozen—air being a bad conductor. In the first, the object to be frozen, say a fillet of haddock, is directly immersed in, or sprayed with sodium chloride brine. In the second, the fillet is placed in an especially shaped can (a different shape for each product) and sprayed with, or immersed in calcium chloride brine. In the third (used by the Atlantic Coast Fisheries at Groton, Connecticut), the fillet is placed on the surface of a metal plate, the under side of which is in contact with calcium chloride brine. In the fourth (the Birdseye system), the fillet is carried between metal belts both of which are in contact with a refrigerant. Both the latter systems give excellent results. General Foods Corporation is particularly proud of the fact that one pound of its pre-wrapped product requires but 26 cubic inches of packing space as against 75 cubic inches required by one pound of the Atlantic Coast product, because the fillets are packed first, and freeze and expand in the package, the shape of which is regulated by the belts.

Shipment is made in insulated cartons. General Sea Foods is able to ship considerable distance in winter without ice. In warm weather ice is used. Atlantic Coast Fisheries requires refrigerating cars, due to its method of packing after freezing, and has secured exclusive rights to the use of Silica Gel cars for the transporta-

[*Continued on page 124*]

ROYAL MASTER



When you draw up at the curb before Pierre's on Park Avenue, or find yourself idling at the wheel before The Breakers at Palm Beach . . . even the most insolent appraisal of your new car must soften to a look of admiration if the tires are Royal Masters. Their unstudied smartness . . . their faultless traction . . . their superb endurance, all bespeak the patrician. And among those who can afford to be extravagant . . . or not, as fancy dictates . . . it is rumored (and truly so) that the Royal Master is likewise a surprisingly economical purchase on a miles-per-dollar basis. Which is only logical, for the Royal Master is the world's finest tire, built by the world's largest producer of rubber.

UNITED STATES RUBBER COMPANY

Strong to Stand Up in the Battle of Big Business

Check up on yourself. How many times in half an hour do you push back your office chair, tilt back, wiggle the arms, hitch over to the right, then to the left?

Active human beings are constantly on the move, even when they are supposedly sitting still at a desk. Each movement brings a strain, a definite wearing action on the chair.

Under the daily strain of use chairs loosen up, wear out, that is, unless they are chairs of Alcoa Aluminum. They are welded into one continuous piece of metal. No screws to squirm loose, no glued-joints to dry out and squeak.

With all their strength, Alcoa Aluminum office chairs are also feather light, fire-safe, long-lived. They offer you substantial upkeep savings.

You can get these modern chairs in natural Aluminum finish or wood grain finish to harmonize with any office. The beauty of the natural Aluminum finish lies in its simplicity, its modernness, its clear, soft sheen. These chairs are upholstered in full grain mission leather in either green, blue, brown or maroon.

The same upholstery can be had in Alcoa Aluminum chairs finished in walnut, mahogany and oak wood grains—also in two shades of green enamel.

A wide variety of styles and types of executive, clerk and stenographic chairs are available. A special brochure "Distinctive Aluminum Furniture for the Office" is now available for distribution. Let us send you a copy.

ALUMINUM COMPANY OF AMERICA
2402a Oliver Building, PITTSBURGH, PA., Offices in 19 Principal American Cities

CHAIRS OF ALCOA ALUMINUM

ALCOA ALUMINUM

Scorching sun, burning sand and the cool relief of palms —not often is the godlike creation of Nature by man's mechanism shown so graphically as here. The creators were the W. P. Films Co., revampers in Britain of America's tempestuous *White Cargo*.

The photograph also illustrates the valiant efforts of the British film industry to produce better pictures—and to make money. Though silence was not particularly golden for British films, sound nearly broke the industry.

The British Hollywood is at Elstree, where the above still was taken, twenty miles from London. Except for the huge iron-roofed sheds of the three companies already operating there, it is a quiet Hertfordshire village with little social life.

Brooks Brothers,
CLOTHING,
Gentlemen's Furnishing Goods,
MADISON AVENUE COR. FORTY-FOURTH STREET
NEW YORK

This Establishment has been operated continuously for more than a Hundred and Ten Years and is still in the control of the Direct Descendants of the Founder

Our Representative
will visit the following cities
during the season to
take orders for
Ready-made Clothing
Furnishings, Hats and Shoes
for Men and Boys
Trunks, Bags, Leather Goods
and Liveries

If you will write us mentioning FORTUNE we shall be glad to let you know the dates on which he will be in the city nearest you

ATLANTA	HARTFORD	PHILADELPHIA
AUGUSTA	HOUSTON	PITTSBURGH
BALTIMORE	INDIANAPOLIS	PRINCETON
BUFFALO	KANSAS CITY	PROVIDENCE
CHICAGO	LEXINGTON	RICHMOND
CINCINNATI	LOUISVILLE	ROCHESTER
CLEVELAND	MEMPHIS	ST. LOUIS
COLUMBUS	MILWAUKEE	SAN ANTONIO
DALLAS	MINNEAPOLIS	SYRACUSE
DAYTON	NEW HAVEN	TOLEDO
DETROIT	NEW ORLEANS	TULSA
GRAND RAPIDS	NORFOLK	WASHINGTON

We are Manufacturing Retailers only: Established 1818. We have no agents except our own Travelling Salesmen and we maintain no branches except our Stores in

BOSTON
NEWBURY CORNER OF BERKELEY STREET
NEWPORT PALM BEACH

A Second Ice Age

(*Continued from page 120*)

tion of fish throughout the land.

In the meat packing industry quick-freezing is still in the experimental stage. With red meats there is a difficulty over and above those experienced in the quick-freezing of fish in that such meats tend to change color as they thaw. Most of the big houses are, however, definitely committed to the undertaking. Batchelder & Snyder, the packing subsidiary of General Foods, has frozen "everything from moose to porpoise" with the Birdseye machine and intends to prepare packaged frozen chops. Swift & Company are producing a complete line of lamb and pork chops, steaks, liver and sweetbreads, which they intend shortly to put on the general market. Geo. A. Hormel & Co. are about to undertake large scale experiments. Armour is already so engaged. Ford-Gustavson Co., Swift & Co., Fairmount Creamery and Armour & Co., are selling quick-frozen poultry. But the problem, from the meat packer's point of view, is by no means simple. In addition to the "bloom" of the meat and the mechanical obstacles to be overcome, there are the retailing difficulties. The public aversion to "cold storage meat" must be surmounted—possibly by advertising the fact that it is already used in many a good hotel. The public must be persuaded to pay an *apparently* higher price for an individually-packaged, frozen chop than for a fresh chop (the *actual* price per ounce of edible meat is lower because all waste is trimmed away at the packing house). Refrigerating counters must be provided, and the whole retailing organization must be rearranged, for packaged cuts, from which a waste has been removed, deprive the butcher of the margin of profit he now makes in charging for weight he later trims away.

The selling of packaged frozen berries and vegetables is also in the experimental stage. Approximately 4,250,000 gallons of strawberries were frozen-packed in the northwest in 1928. These berries, which change color on defrosting, but retain flavor and aroma, are widely and successfully used in baking and in ice creams, etc. Other berries, particularly raspberries, are successfully frozen and marketed. With vegetables it has been found that, though flavor and color can be retained, texture alters due to the fact that vegetable cell walls are rigid and will not yield to the pressure of the crystals formed. Asparagus collapses. Corn on cob goes soggy. String beans are "slightly limp". (But on the other hand peas are "equal to cooked fresh peas in all respects".)

But with the exception of the texture of fruits and vegetables, the technical difficulties in the way of the successful quick-freezing of perishable goods seem to be surmounted. Harden F. Taylor, vice president in charge of research at the Atlantic Coast Fisheries, has completed experimental work which seems to prove that even with quick-freezing and the unbroken cell wall, there is still a leakage by osmosis in defrosted meats and fish. This he attributes to the fact that, at death, and due to fatigue from the struggle preceding death, the gelatinous substance contained in the cell breaks up into a liquid and a stiff rubbery mass, and that the liquid tends to escape. His cure, now in use at the Atlantic Coast, is a patented chemical bath which restores the homogeneity of the cell content. Other manufacturers, however, report no shrinkage in their product.

The difficulties in the way of retailing remain considerable. Quick-frozen foods must be held at temperatures of 15 to 20 degrees Fahrenheit. They must be displayed, for it is only by appeal to the eye that the frozen lamb chop can surmount the general prejudice against frozen meat. The display case must be protected against loss of cold and formation of moisture, fogging the glass. It must be so built that the chilling unit can be defrosted without raising the temperature of the case. And it must be capable of very low temperatures. The General Electric Company is now at work on such a case as are other manufacturers. The question whether it can be manufactured at a cost within the reach of small retailers remains open.

Assuming, as the facts permit, that the major problems will be solved, it is obvious that economic consequences of the first importance will follow. The Atlantic Coast Fisheries ship, in hermetically sealed, vegetable - parchment envelopes, frozen fillets of boneless, skinless haddock reposing upon their own obituaries in the form of recipes upon a waxen card. Silica Gel Refrigerator cars transport them to Fort Worth. There they may be

sold!

18% of all american motor cars

30% of one company's baking powder

24% of all american sewing machines

35% of one maker's razor blades

30% of one company's facial cream

44% of all american typewriters and accessories

in foreign markets

For years the principal exports from the United States were foodstuffs and raw materials. Now over 50% of our products sold in foreign markets are manufactured articles.

This trend is indicative of the growing opportunity that exists for the continued expansion of American business. For many products the present problem is one of intensifying activity in those markets where an investment will bring the most immediate return. The countries requiring more intensive cultivation can follow in order of their importance.

• An intimate knowledge of the determining factors can only be ascertained by investigations conducted within each country. The methods to be pursued in developing intelligent promotion must also rest on facts brought to light through local surveys.

Through fifteen main offices and ten sub-offices, covering fifty-eight nations, the J. Walter Thompson Company offers a world-wide system of market analysis and foreign advertising—an organization manned largely by native personnel operating under the direction of Americans. The total population covered by these offices is six times as large as the United States; the per capita buying power is far higher than generally realized.

• Through these foreign offices, the J. Walter Thompson Company offers American business accurate surveys. In advance we can locate markets, determine their importance, and forecast the investment necessary in sales promotion and advertising.

For full information please write us direct at our New York address.

J. Walter Thompson Company

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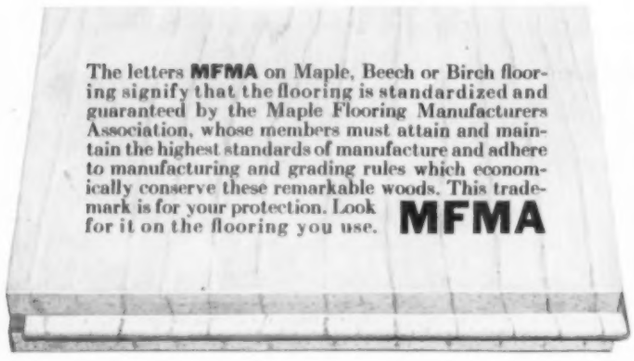

The letters **MFMA** on Maple, Beech or Birch flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture and adhere to manufacturing and grading rules which economically conserve these remarkable woods. This trademark is for your protection. Look for it on the flooring you use. **MFMA**

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distributed, like envelopes of peanuts, through any retailer who has a cold counter to keep them in, or delivered directly to the domestic Frigidaires. The Fish Shop need not handle them at all. Or Batchelder & Snyder, at some date to come, ship from their packing plant in waxed, glazed, trademarked paper cartons, lamb chops, spareribs, roasts, steaks, chickens, liver. The drug store handles them, the A. & P. The rendering is done at the packer's plant. There is no need of butchers and the balanced cleaver follows the hand-loom and the glass-blower's pipe. There are no scraps, no waste (the Airedales take to biscuit, creating a new market for the mills). Or the Everett (Washington) Cold-Pack Plant ships out directly to its housewife customers in Maine, "bottles" of strawberries (no longer blue), waxpaper jars of peas ("equal to cooked fresh peas in all respects") and beans, not limp.

Various consequences follow. Electric refrigeration in the home becomes a necessity and the most perishable foods are bought, frozen, in large quantities, kept until needed, thawed, and eaten as though fresh. The "preserved" taste vanishes from foods previously canned (although the canned asparagus retains its place: the public prefers the tinned taste to the fresh). In the towns, Liggett's (drug stores have in general better refrigerating equipment than grocery stores) becomes the general store, displacing the butcher shop and the fish market. There the housewife will buy sassafras, aluminum pots, gramophone records, Ford tires, lamb chops, Lucky Strikes, porterhouse steaks, toys, trout, and frozen fruit (ready to be eaten cold, as a dessert, or thawed and rinsed, as fresh apricots). The packers are enabled to pack, rapidly and simply, large quantities of perishable foodstuffs with a relatively small investment for machinery and containers. Their equipment becomes more elastic and is better adapted to surplus crops. They are able to receive the heavy August and September runs of fancy grass-fed cattle which, because of their watery flesh, are useless for slow freezing, butcher them, quick-freeze the cuts and so stabilize the price to the producers. So also the fish industry wipes the shadow of Friday from the sea and changes the price of fish which now runs from 4c Monday to 12c Wednesday to 1c Saturday, to an even weekly price. (And conceivably the price to the consumer falls.)

The ice of the second Ice Age, like that of the first, is in movement. Some that are now mountains may well be lakes when it is past. Continents will alter, and geologists study, as now, the ice-scratched rocks of Illinois, the heaped-up cities that will be its high moraines.

Orchids

(Continued from page 96)

individual water bottle with a cork that does not leak. Bound Brook plans to use the airplane. It is beginning to advertise. It has become, in fine, big business.

As such it has been recognized, for something less than a year, by the holding companies of the house of Charles D. Barney & Co. In the strong-boxes of Selected Industries, Inc., the securities of Thomas Young Nurseries rest without discrimination beside those of the Kraft-Phenix Cheese Co. and other businesses somewhat more basic than orchids. Nor is the flower business in any sense a mere hobby. A rough estimate of the value of cut flowers sold in the U. S. reaches $400,000,000 annually. When Mr. Bunker obtained an option on the nurseries and set out to interest Charles D. Barney & Co. in the purchase, he may have found an initial disinclination to regard the orchid seriously, but he was able to convince the Barney house that $2,500,000 was not too large an investment.

This was in May, and by winter, Charles D. Barney & Co. had no reason to regret their decision. For the net profits of the Thomas Young Nurseries (85% orchids, 15% gardenias) in 1929 were not less than $750,000 and may have reached $850,000. Even after all possible effects of the October market break have been discounted, the investment remains a good one.

Mr. Bunker is a promoter and a manager. His approach to orchids last spring differed not at all from his earlier approach to oil or lead. Seeing the possibility of turning a disorganized business into an efficient producing and distributing unit, he proceeded to bring to the Thomas Young Nurseries all the advantages of Wall Street capital and management. He labored in an office, at 120 Broadway, not far from the building where Jay Gould sat and dickered with agents for exotic flowers from far wildernesses. But the difference in the relation of these two men to the orchid is as wide as the differences in the centuries they inhabited. It is as wide as—and not unlike—the difference between haphazard fungus and the agar of the laboratories of Cornell.

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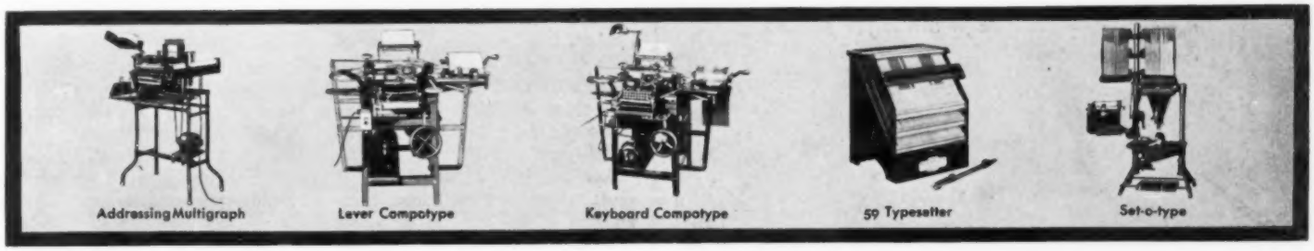

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And no matter where you go you can find imitations of it on sale . . . imitations made without even the faintest idea of what the Pinaud formula really is . . . imitations whose makers know only that somehow the Pinaud formula does do marvelous things for the hair—and that almost any kind of concoction can be marketed (for a while, at least) if put up in a similar bottle with a label that looks something like Pinaud's Eau de Quinine.

That is why it will pay you to look for the name Pinaud when you buy Eau de Quinine—for just as imitators cannot copy the Pinaud formula, they *dare* not copy the Pinaud name.

For 150 years the House of Pinaud has been proud to offer the world just such products as this—products perfected often after decades of effort, with a superb disregard of time, of cost. Look for them at your favorite drug or department store.

Pinaud
PARIS · NEW YORK

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Radio Corp. of America

(*Continued from page 84*)

cal debates, its educational features, its crop reports for the lonely farmer, its Two Black Crows, its setting-up exercises and its bed time stories. Instead, presumably, he went songless to sleep.

The rapidly growing popularity of broadcasting meant a huge sale of radio receiving sets, which the Radio Corporation began to produce in corresponding quantities. By 1925 its gross income was $4,000,000 from transoceanic and ship radio service and $46,000,000 from the sale of radio equipment. In 1928 the transoceanic and ship radio service yielded $6,000,000 and the sale of equipment $86,000,000—proportion of 1 to 14. Thus what Woodrow Wilson achieved for the patriotic idea of a U. S.-owned radio communication service by ironic mutation became the means of national amusement. Indirectly, but none the less fundamentally, Wilson made possible the ascendancy of a star like Charles E. Mack, better half of the Moran and Mack team, and since his *entrée* into radio (the team is reputed to have been paid $7,500 a week for 26 weeks by Grigsby-Grunow, makers of Majestic Radio) undoubtedly better known to most U. S. citizens than any Senator except perhaps Heflin.

Here again was the unpredictable quality of electrical development opening up new commercial vistas for what began as a simple communications company. The Radio Corporation naturally commenced to build broadcasting stations and acquired a 50% interest in the National Broadcasting Co. It was only one more step to deal in talking moving picture equipment (RCA Photophone Inc.); yet another step to use the rights for this equipment to acquire and develop a great movie theatre-and-production company (Radio-Keith-Orpheum Corp.); one step further to enter the electrified phonograph business, by absorbing the Victor Talking Machine Co. (now RCA-Victor Company, Inc.); another step to acquire control of two Tin Pan Alley Music Publishers (Carl Fischer, Inc. and Leo Feist, Inc.); some day it will be a very small step to enter the field of television.

In short the Radio Corporation, set up as a communications agency, found itself transformed by the erratic genius of electricity into a great amusement company. It was no one man's intentional doing. With the change of its interests came a corresponding development of personnel. In 1923 Major General James G. Harbord became the president; in 1930, Chairman of the Board. Today Young heads Radio Executive Committee. Confining his interests mainly to the electrical manufacturing industry of which he is the acknowledged leader, he has also taken an active interest in the Radio Corporation's advance across fresh fields of enterprise. In the talking cinema Mr. Young anticipates a new art form reflective of modern American civilization. Major General James G. Harbord, not fundamentally a man of commerce becomes chairman. But when one looks for the really indigenous Puck in the Radio wood pile, one finds David Sarnoff. He will not be 39 until February 27th next. Thirty years ago at the age of nine he came to this country from his birthplace, Uzlian, near Minsk, Russia, where his parents had hoped that he would be a rabbi. At 15 he fell in love with radio and became an office boy to Marconi Wireless Telegraph Co. He was an ardent wooer; at 17 he was one of the fastest wireless operators in their service. At 18 he was managing the Sea Gate station, then the busiest in the country.

At 21, he had himself demoted in order to give himself time to study electrical engineering. As an operator in the high-powered station atop John Wanamaker's store, he first acquired international fame when the *Titanic* sank on April 15, 1912. Soon thereafter Congress ordered all sea-going ships carrying fifty or more passengers to equip themselves with wireless sets.

After that Sarnoff became Assistant Chief Engineer of the Marconi Wireless Telegraph Company, and his titles changed almost yearly in recognition of his unique ability. In 1919 he passed from Commercial Manager of the Marconi Company to Commercial Manager of the Radio Corporation, but his progress went on uninterrupted. He has been called General Manager, Vice-President, Executive Vice-President; last month he became President. Such is the new character which the unforeseen evolution of radio produced to play a prominent part at the curtain of the first act.

Before the curtain fell, however, a third figure—a third situation—moved softly out upon this fast-shifting scene to add a complication well known to Greek comedi-

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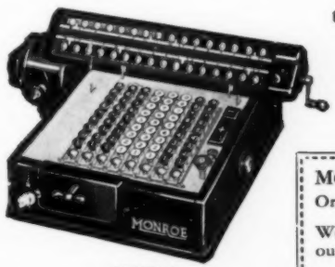

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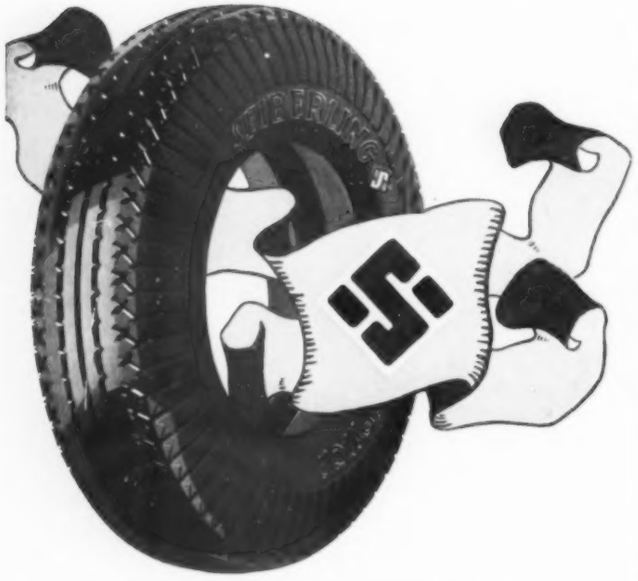

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For more than 30 years, the Seiberling name has signified unresting improvement, enterprise, invention—and always unchallenged integrity. Now, at the beginning of 1930, the sources of this generation-long renown are reflected more clearly than ever in the latest Seiberling product. . . . No less than six major advances, in manufacturing process, in selected raw materials, and in improved design, signally distinguish the new Seiberling Special Service Balloon Tire. From tread to bead, it is the exclusive quality result of Seiberling experience, progress, and ideals. . . . As such, it is not susceptible of comparison by any other tire standards. There is no like—but only contrast. . . . The Seiberling Rubber Company, Akron, Ohio.

Seiberling

ans. As a *deus ex machina* he was sent from on high to round out the destiny of the Radio Corporation's communications business.

It is quite possible that Woodrow Wilson at Paris, in the spring of 1919, knew of a certain business man, then in his middle thirties, a man born at St. Thomas in the Danish West Indies. Certainly the war President should have seen the young man's name, for, during the war, he had affixed his signature to the commission of Lieutenant Colonel Sosthenes Behn.

What President Wilson could not foresee was the day that Lieutenant Colonel Behn, tall, dark, slender,—already successfully operating the telephone systems of Cuba and Porto Rico—was to walk into the anonymous building at 23 Wall Street. Where Lieutenant Colonel Behn walked in, he also walked out, but with him in his departure was the financial backing of J. P. Morgan & Co. So was born—a year after the Radio Corporation—the International Telephone & Telegraph Corp.

Woodrow Wilson did not live long enough to recognize, even in afterthought, the bearing of that event on his radio-communication brain child. For a number of years I. T. & T. pursued a course that seemed destined to establish it as a sort of duplicate of the American Telephone & Telegraph Co., but in the foreign field. I. T. & T. collected telephone systems in Cuba, Porto Rico, Spain, Mexico, Chile, Argentina, Uruguay and Brazil. It bought the foreign branch of the Western Electric Co. and became a great telephone equipment maker on every continent except North America.

But ten years brought changes in I. T. & T. only less great than the changes in the Radio Corporation. In 1927 I. T. & T. acquired the All America Cables, Inc., connecting New York with the West Indies and the west coast of South and Central America. A year later it acquired for $60,000,000 the Mackay system (Postal Telegraph & Cable Corp.) and Clarence Mackay began to refer to Colonel Behn as "boss". Both of these cable systems have radio interests and are enlarging them. I. T. & T. became, in short, another American radio communication system with stations not only in several parts of South America but in the United States.

So the stage was set for the final scene of the act, again in Paris. It was as momentous if not quite so stirring an occasion as that of 1919; the powers of the world of business were assembled to complete the liquidation of the war. At the head of the table sat the former vice-president of the General Electric Company, the man who in 1919 decided that President Wilson's request could be heeded, a great American radio company formed. Another figure at the table was that of Thomas W. Lamont, member of the Morgan partnership, supporters of I. T. & T. And around the table rushed busy David Sarnoff, an unofficial shadow, doing no small share of the labor there performed.

On the field of negotiation David Sarnoff had won the confidence of Dr. Hjalmar Schacht, the chief German representative. At the crucial point in the negotiations, Sarnoff and Schacht spent a whole night, dinnerless, from dusk to dawn, in earnest conference. On the following day virtual agreement on the Young plan of reparations was announced.

But that was not all which came of that reunion of the nations. In the days when Young, Lamont and Sarnoff were gathered at or near the conference table, somehow the news sped forth from Paris that the Radio Corporation had agreed, "if and when the laws of the United States permit," to sell its radio communications interest to Lieutenant Colonel Behn's International Telephone & Telegraph Corp.

There is in the United States a law forbidding the merger of radio and cable companies. It was passed to insure competition between the undersea cables and the air, forgetful of the enormous duplication of equipment this entailed. Unless and until this law is modified, it will be impossible for the Radio Corporation to sell its radio communications to I. T. & T.; the consideration of the sale, stock worth about $100,000,000 at current market prices, remains a figure of speech. Congress is preparing another radio law but what will be its bearing on this proposal is still undetermined.

No more is needed to round out the act, to set the final scene beside the first as a perfect illustration of the adage about mice and men. A decade of rapid electrical development has brought wholly unanticipated changes in the character of the Radio Corporation. In the same period, another situation in the field of world communications has been created which bears an ironic resemblance to the one President Wilson mused upon in the Hall of Mirrors. And again, it is Owen Young who attempts to save the situation.

In 1919 the threat of British domination of the air, through

[*Continued on page 140*]

"You can't have fortune . . and ignore me"

"I'm the destroyer of fortune wherever I get my hands on it. You've probably done a good deal to block me, but wherever I break through I don't stop with the mere destruction of your property. I cripple business for months—even years—because when I strike business property, I strike deeper than the surface. I stop business income by destroying its source. I am more than Fire—more than Destruction. I am

Business Paralysis."

That is Fire's message to property owners.

Business property burns—and fire insurance assumes the burden of its replacement. That is the accepted idea of all that happens when Fire breaks through your defences.

But what is going to happen to the intangible business structure while the material property is being replaced? What of unfilled orders, profits, expected business income from operations? There are contract salaries to pay—fixed expenses to meet—dividends to pay. Where's the money coming from to pay them?

There's only one way to prevent this form of loss. Fire insurance can be made to pay the loss on the property and in addition help fill the gap of idle months after fire. The Hartford agent has a complete plan of business insurance that provides the normal expected income of a business that has had its operations stopped by fire . . . during the period of its idleness.

Whatever your safeguard against Fire, it should include this farsighted, intelligent provision against Fire's paralyzing effect on business operations. The Hartford agent* will gladly explain this insurance to the man in your organization responsible for this phase of your business.

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$7,000,000 INVESTMENT
The Gulf Refining Company has invested over 7 million dollars in White Trucks. Transportation is a vital part of their business and only the proved superiority of White performance could justify such a tremendous investment in a single make of truck.
GULF
GULF REFINING COMPANY

A Single Fleet of 2221 WHITES hauls over 700 million gallons of gasoline a year

Here, in facts and figures, is the story of an accomplishment without parallel in motor transportation. The story of the largest standardized fleet of trucks in the world. The figures are amazing—the facts challenge comparison.

Back in 1911 the Gulf Refining Company purchased its first White Truck. Careful records were kept on that first White—costs were recorded and performance was checked and rechecked. On strictly unbiased tests of performance new Whites have been added each year, until today there are 2221 White Trucks in this single fleet.

With this great fleet of Whites, Gulf hauls over 700 million gallons of gasoline a year—enough gasoline to supply every automobile in the United States with over 30 gallons each. This tremendous gallonage is hauled at an unprecedented low cost per gallon. Besides gasoline the fleet hauls over 107,000 tons of bulk tonnage in oils and greases. More than 24 million truck miles are rolled up annually—

a distance equal to 960 times around the world.

In this fleet there are 416 Whites that have run over 100,000 miles each and many are covering their daily routes with 12 to 14 years of service to their credit. No higher tribute to the dependability of White Trucks could be found than the fact that Gulf has never discarded a White because it has worn out and has never used any other make of truck since 1911.

The distributing of gasoline and oil by the Gulf Refining Company is on a gigantic scale. Gulf operates in 23 states—serving thousands of stations along the Atlantic seaboard from Maine to Florida and the Gulf Coast as far west as Texas. Such widespread operation demands the highest efficiency and economy in hauling. These Whites must keep rolling day in and day out without regard for road or weather.

To accomplish this, supervision of the entire fleet is conducted from headquarters in Pittsburgh. Every item of operating and maintenance cost is accurately recorded, together with the history of each truck, its physical make-up and its performance. There is no sentiment, no leniency in the tabulations. Each truck is judged on the basis of the cold facts. The fleet is always kept up to the highest point of efficiency both from the standpoint of appearance and operation. Even repainting is a part of scheduled attention.

The same kind of remarkable service that has made the great Gulf fleet of Whites famous is true of all White Trucks throughout the oil industry. More White Trucks are in the service of the oil industry than trucks of any other make. There is a logical reason for White leadership—a leadership built on the solid foundation of outstanding performance in every field of business, in every kind of transportation service. The fact that 1311 of the country's foremost owners operate 46,511 Whites in fleets of ten or more is convincing evidence that White gives you more for your transportation dollar whether you buy one truck or a fleet.

The economy and efficiency of standardizing on quality transportation is expressed in the statement of Mr. E. H. Grey, General Superintendent of Motor Equipment, Gulf Refining Co.:

"White Trucks have made a wonderful record in the service of the Gulf Refining Company. Their stability and durability is shown by the fact that all the Whites in our big fleet are still in service. During the last dozen years a number have been lost in accidents, but our pioneer trucks are still on duty. By standardizing on Whites we have lowered operating costs and increased efficiency and our records show that we do not get an increasing maintenance cost with quality units. Our 10-year-old Whites cost no more to operate than new ones added to the fleet."

THE WHITE COMPANY, CLEVELAND

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A COMPLETE LINE OF FOUR AND SIX CYLINDER

TRUCKS
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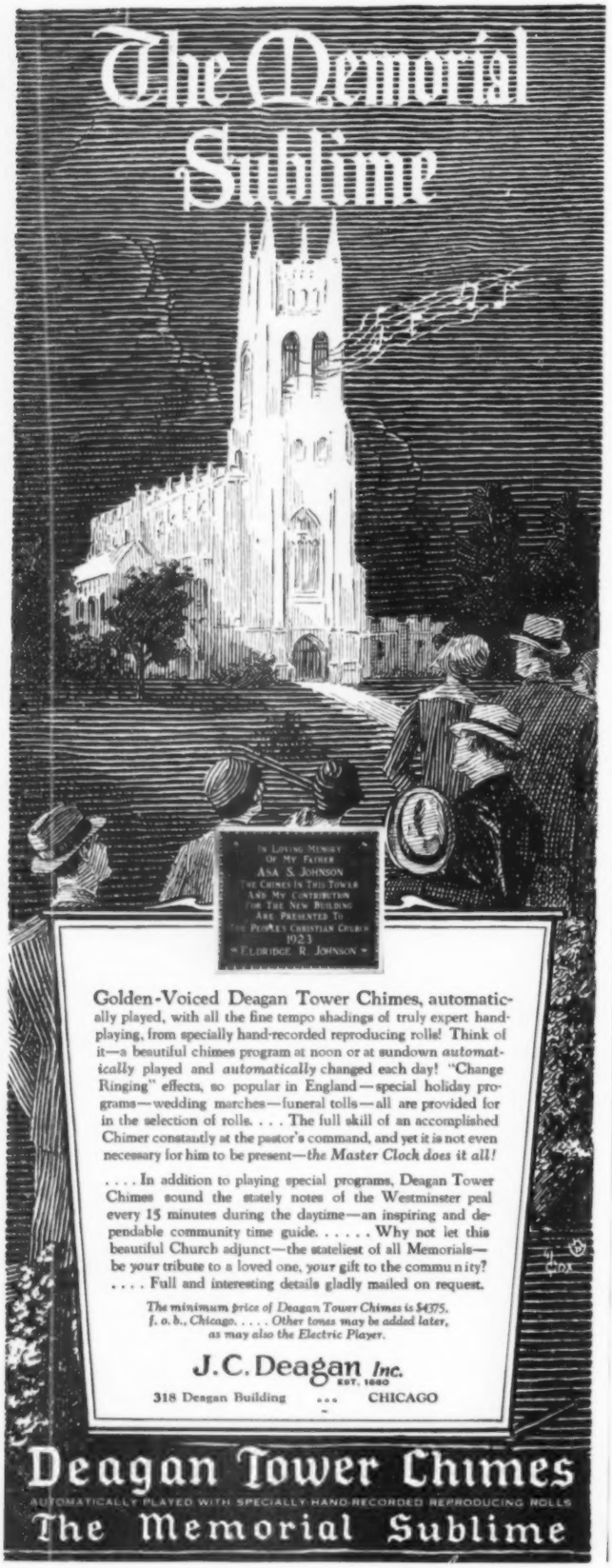
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In Loving Memory Of My Father ASA S. JOHNSON The Chimes In This Tower And My Contribution For The New Building Are Presented To The People's Christian Church 1923 ELDRIDGE R. JOHNSON
Golden-Voiced Deagan Tower Chimes, automatically played, with all the fine tempo shadings of truly expert hand-playing, from specially hand-recorded reproducing rolls! Think of it—a beautiful chimes program at noon or at sundown automatically played and automatically changed each day! "Change Ringing" effects, so popular in England—special holiday programs—wedding marches—funeral tolls—all are provided for in the selection of rolls. . . . The full skill of an accomplished Chimer constantly at the pastor's command, and yet it is not even necessary for him to be present—the Master Clock does it all!
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Deagan Tower Chimes
AUTOMATICALLY PLAYED WITH SPECIALLY HAND-RECORDED REPRODUCING ROLLS
The Memorial Sublime

Banking—Group and Branch

(Continued from page 65)

public, in short, is well pleased.

Here in the Northwest the mysteries of group banking were most perfectly unfolded. And here perhaps there was best reason for it, because here the record of independent bank failures had been worse (due to condition of agriculture) than in the U.S. as a whole. But the idea spread last year with incredible swiftness so that November calculation indicated that there are now 273 chains and groups owning 1,858 banks with about 20% of the total banking resources of the U.S.

Bank Mergers

But we are not yet ready to analyze the fundamentals in the trends of Branch and/or Group Banking. First we must note the enormous increase in the size of individual banks. Over a period the Chase National became the second biggest National bank (in volume of net deposits) without any mergers. But last year, it would have fallen to a much lower place had it not absorbed a hundred million dollar bank. Other banks were merging at an almost breathless rate. By merger, the National City not only kept its place as biggest U.S. bank but jumped from a billion dollar to a two-billion dollar bank. From a two-billion dollar bank, National City next prepared to soar to the title, "world's biggest bank". But acquisition of the Corn Exchange was halted by the October Panic which forced Corn Exchange stock below the price at which National City had offered to purchase it in the terms which Mr. Mitchell had arranged just before his September departure to Europe.

The explanations of this new U.S. breed of giants are various, but, in the main, are closely related to all phases of the present banking question. Motivation is often believed to be nothing more than the personal ambition of bankers. The public, regardless of the inextricable truth, loves a tale so motivated. The Chicago press screeched with delight when the Continental Illinois, resulting from the merger of the two big Chicago banks whose personal traditions were most noticeably divergent, became "the world's biggest bank under one roof". As a result of the consolidation, the Messrs. Reynolds, who had come to Chicago from Iowa, were hailed as "biggest bankers outside New York". And an insurance man, Donald R. McLennan (whose son was Yale's star in last fall's Princeton game), and Charles Glore of Field, Glore & Co. were given front-row seats among Chicago financiers by reason of their influence in the merger. In Atlanta, when the Atlanta & Lowry-Fourth National consolidation was effected, the new bank was promptly proclaimed as "biggest bank in 13 Southern States," bringing new prestige to John K. Ottley and T. K. Glenn. It was no fun for the Treasurer of the Republican Party, Joseph R. Nutt, to learn that his Union Trust Company of Cleveland ceased to be "biggest bank between Chicago and New York" when the Guardian Detroit group and the Union-Commerce Corp. merged to form the half-billion-dollar Guardian Detroit Union group, headed by Mr. Robert Owen Lord. Other banks have become "biggest in Missouri outside of St. Louis", "biggest in Colusa County, Calif.", etc., etc.

Akin to ambition is greed. Occasionally mergers result because a sharp promoter's eye sees a chance for huge and easy profit in the transaction. This is rare—much rarer than in the case of group-formation—because banking is sufficiently regulated and the publicity given to such transactions is sufficiently great to prevent the usual dodges of the promoter. The economist who would ignore the factors of ambition or greed would be a very stupid economist; but it is a wise economist who seeks yet more compelling causes for so gigantic results.

The basal cause of bank-mergers is desire to establish an organization that has the elements not only of greater profits but more especially of permanent, steady profits. Veterans like the Irving Trust Co., which is a record holder for working out big mergers successfully, acquire a technique for organization with just this purpose in mind.

Experience to date (but not adequately covering the hugest mergers) shows that the bigger the bank, the greater, generally, is its rate of profit over a period of years, caused more by greater stability than by a sudden increase. In the typical state of Illinois, banks with earning assets (closely agreeing with deposits) under two million dollars showed 5.2% earned on invested

A Portrait that Speaks for Itself

WHO would call himself a connoisseur who must look for the master's signature on any canvas? Who would term himself an epicure who needs more than a taste to divine the recipe?

Surely, you regard yourself as a man of judgment and discrimination. True . . . you may ride in blissful ignorance of the maker of your tires, you do know quality, even in tires, when you see it. No connoisseur of casings, perhaps . . . you nevertheless can judge a value! If this be true, look upon the portrait just above. Look closely . . . and answer one question . . .

Is it any wonder, in view of what you see, that discriminating car owners are quite content to dismiss their tire problems by saying, quite firmly, "Silvertowns de Luxe, please," when new tires are needed? The B. F. Goodrich Rubber Company, Est. 1870, Akron, O. Pacific Goodrich Rubber Co., Los Angeles, Cal. In Canada: Canadian Goodrich Co., Kitchener, Ontario.

Goodrich Silvertowns de Luxe

XUM

capital as opposed to 8.6% earnings for those in the two-to-ten million class and 11.8% for those above ten million. Certainly 5% is much too little for a bank to earn, especially since a surplus must be built up before dividends are paid. Even 12% is little enough and the presumption is that a ten-million-dollar bank (which is certainly not a large bank) might do well to hook into a three- or four-hundred-million-dollar bank which may earn from 12% to 20% on its invested capital. (George F. Baker's bank, together with its securities company, actually pays out 100% in dividends on its relatively small capitalization, but this is unique, and even in this case as in nearly every other a bank puts more money into surplus and increased capital than into stockholders' pockets.) Many are the reasons why a bank's rate of profit increases with size. These we may summarize:

1. *Satisfaction to All Customers.* Up to an unspecified limit, the bigger the bank the better it can obtain for its customers: bonds and stocks, information about the other fellow's credit, statistics, tickets to Timbuctoo, boxes, management of his wealth when he is dead and food for his vanity when, still alive, he walks beneath painted ceilings in a beauteous building that is "my bank". This is especially true when different kinds of banks merge—e.g., a commercial bank absorbing a trust company, and then possibly organizing an allied security vending company. (It should also be noted that the Federal Law *does* permit National banks possessing a capital and surplus of one million dollars or more to have branches in Foreign Countries. With the growth of Foreign Trade this tends to attract customers and the privilege has been widely used.)

2. *Satisfaction to Customers Who Borrow.* Because it sounds so simple, the most common justification for bigger banks is to "keep in step with bigger business—billion-dollar corporations must have billion-dollar banks". A bank, of course, cannot lend more than 10% of its capital surplus and undivided profits (except with securities or commodities as collateral) to any one concern. U.S. Rubber Co. with

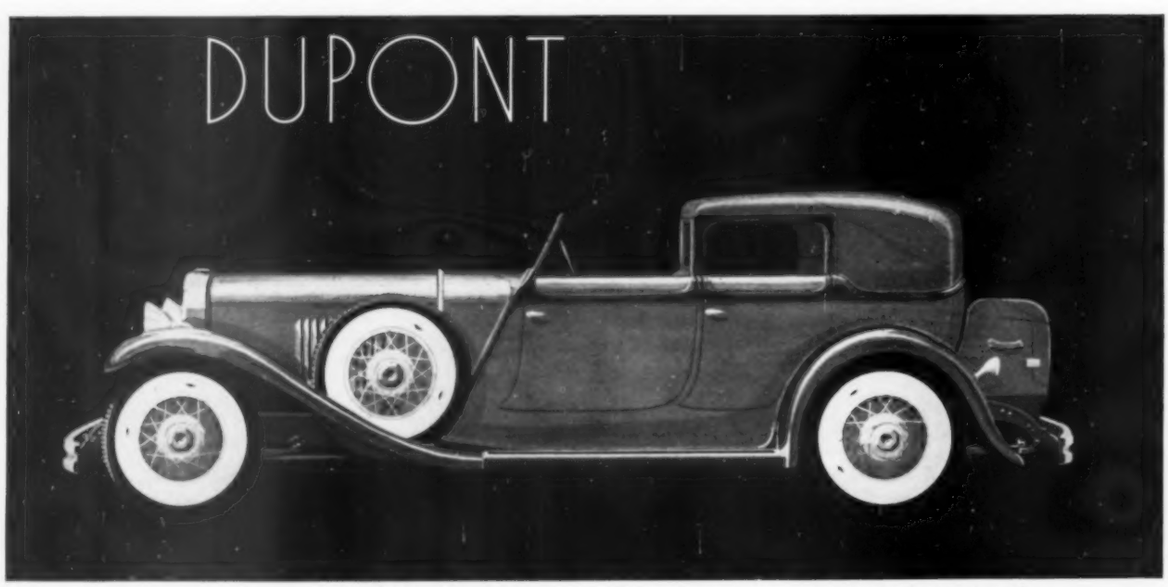
A Note on Andrew Price

Twenty-five years ago is exceedingly long ago in the State of Washington. Then it was that a grammar school boy who had been getting his schoolmates to start savings accounts wrote to his uncle: "My dear Uncle Andrew . . . if you come out here we will go into the banking business together. I think it would be very profitable . . .

(signed) Andrew Price
Solicitor of Accounts"

By 1926 Andrew Price was the *enfant terrible* of Seattle banking. Already making money from the Marine National and Marine State banks, he suddenly opened the Marine Central Bank on the outskirts of the town, shocked the wiseacres by bringing in the greatest opening day deposits ever recorded in Seattle. He was soon the most active banker in the State, controlling large "downtown banks" and several in other towns. It was the triumph of the "Bancorporation", a word he coined in 1927 when he formed the Marine Bancorporation, to own all his banks.

Conservatives began to capitulate to his side when they heard that C. J. Lord of Olympia, sonless dean of Washington bankers, had sold his bank to the Bancorporation, had himself become affiliated with it. Later even Seattle's rich National Bank of Commerce, which did its first business over rough boards, joined. Although in Seattle the Bancorporation must compete with the new and mighty First Dexter Horton group, by December 1, 1929, it included 10 banks, had combined resources of $54,000,000—a far more powerful financial institution than the Pacific Northwest dreamed of a decade ago.



Du Pont Town Car • • Straight Eight Motor • • 140 Horse Power . . Individual Coachwork

A DU PONT OFFERING TO THE SUCCESSFUL MAN

DU PONT MOTORS, Incorporated, WILMINGTON, DELAWARE

NEW YORK *502 Park Avenue* • PHILADELPHIA *901 North Broad Street* • BALTIMORE *10 West Eager Street* • LOS ANGELES *3733 Wilshire Boulevard*

dP DUPONT

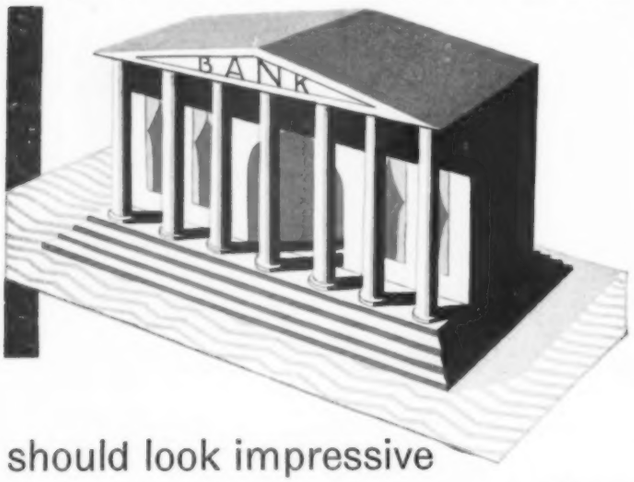
IN THE HOLLOW OF HER HAND

. . . . . SHE is 16; she is 30; she is 65. She sells eggs in the country, notions in a department store, bonds on Wall Street. She is a graduate of the fourth grade, high school, or occasionally Smith. She wears $15 frocks, home-sewn dresses, Chanel gowns. She is a drudge, a hoyden, a help-mate, a lady; she is the aggregate American woman . . . and, in her various ways, she is the spender of the nation. Deciding how the bulk of her family's money shall be divided, she controls the profits of many manufacturers. Extravagant, frugal; wise, foolish; fickle, dependable; she holds *your* business, in all likelihood, in the hollow of her hand . . . . The successful advertising of many of our clients talks a woman's language: color in kitchens and bathrooms for Crane Plumbing; interior decoration for Karpen Furniture; smartness for Marshall Field and Company, Retail; home movies for Filmo Cameras; bright attractive jackets for Capitol Boilers; and even Wilson Brothers advertising, directed to men, has invariably invited women, who buy 65% of men's haberdashery, to read between the lines.

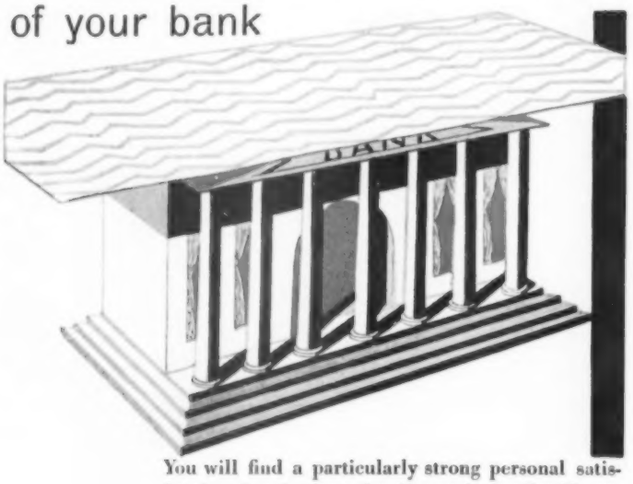
CHARLES DANIEL FREY COMPANY * GENERAL ADVERTISING AGENCY

333 North Michigan Avenue, Chicago . . . . . Magazine, Newspaper, Outdoor, Radio, Direct Mail.

If the name of your bank is important enough to add prestige to your checks . . . your checks



should look impressive enough to suggest the prestige of your bank



You will find a particularly strong personal satisfaction in signing checks made on La Monte National Safety Paper. No one can mistake their decided atmosphere of distinction and authority.

La Monte Safety Paper conveys a definite impression of your own good taste—and it establishes your position as a customer of one of the nation's more progressive banks. Rich, dignified, handsome, this outstanding check paper is the choice of more than 60% of the great banks in America. George La Monte & Son, 61 Broadway, New York.

The wavy lines instantly identify La Monte National Safety Paper—the standard in check papers.

LA MONTE
NATIONAL SAFETY PAPER
FOR CHECKS

1928 gross sales of $193,000,000 might at any time wish to borrow as much as $15,000,000 unsecured. A bank's capital funds would have to be in excess of $150,000,000 to accommodate this borrower, and such a bank would probably be a "billion-dollar bank"; i.e., total resources exceeding a thousand million. All this is true, *but*, as we shall see later, there is no pragmatic compulsion about this argument for two reasons: a) the number of corporations who borrow over a million from banks in preference to other forms of financing is relatively small in these days of bank acceptances, strong cash positions, stock issues, etc.; b) many corporations prefer scattering their bank accounts widely and have no difficulty borrowing from a number of banks each willing and even competing to lend their "legal limit" to a good borrower.

3. *The Promotional Affiliate.* A habit of banks upon attaining a great size is to organize an investment company as an "affiliate" and some have even proceeded to form investment trusts. The same people who own the bank own the affiliate. The affiliate can make enormous profits out of underwriting stock and bond issues. The affiliate is technically separate from the bank but obviously there is close cooperation. It is a serious question whether the cooperation may sometimes be too close, thus getting the bank into promotional activities of which it should be judge rather than advocate. But certainly affiliates offer great profit possibilities—and therefore a reason for banks big enough to create them.

4. *Operating Profit.* Large scale operation provides an opportunity to make the cost of each function less. Also, large banks can pay for better executives who, presumably, are efficient, profit-creating.

But not only may a bank see bigger profits in merging; it may, alas, see decreasing profits if it does not merge, for competition in banking is as fierce as it is funny. It is funny because all that the Rotarian claims for Service is literally true in the case of banks. Normally there is little publicly proclaimed competition as to the price of money—nor is one bank fond of making a loan which a rival bank would refuse; so in Service, banks must exhibit all their rivalry.

Now of all the services and satis-

[*Continued on page 165*]

Radio Corp. of America

(*Continued from page 130*)

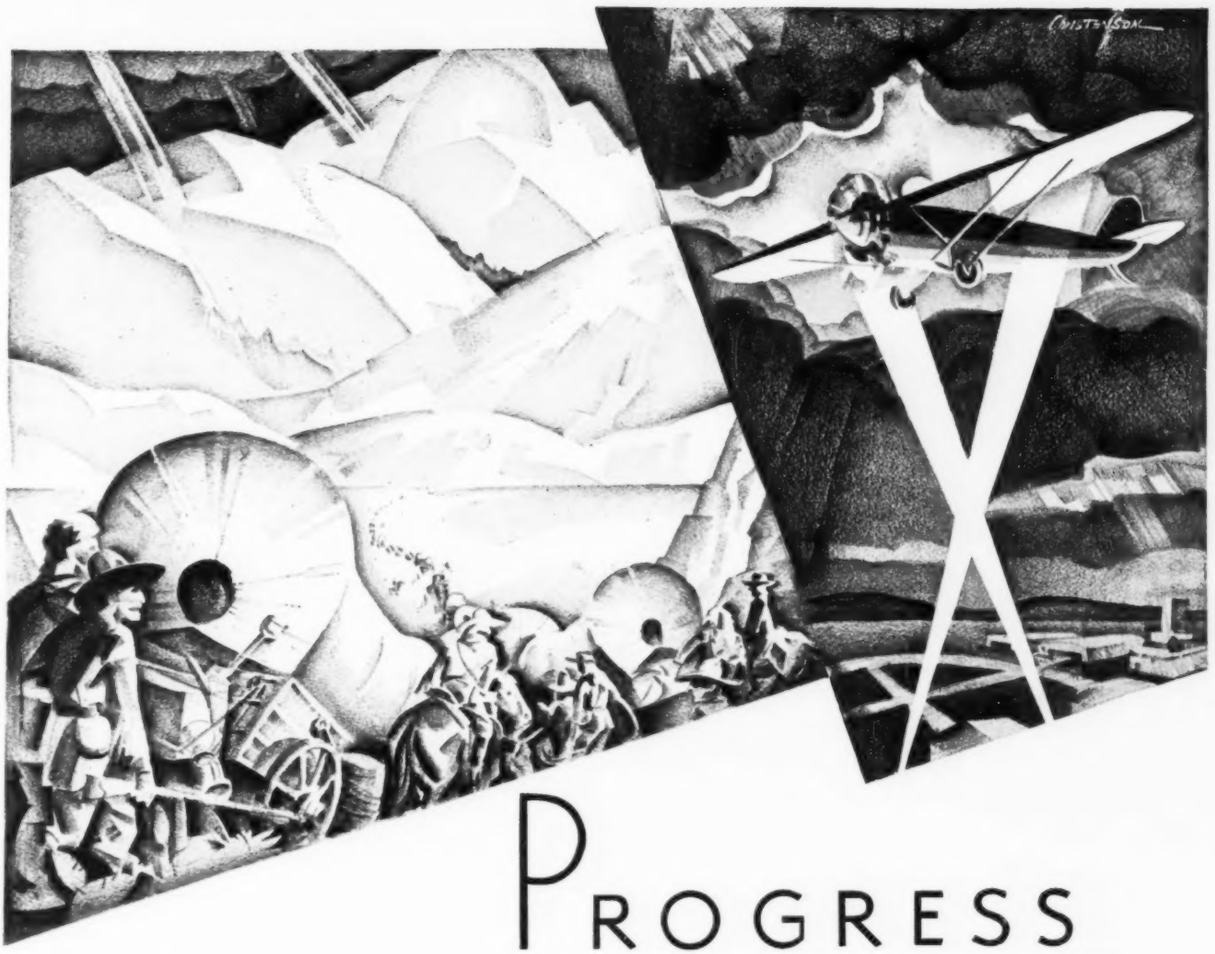
acquisition of the Alexanderson alternator, led directly to the formation of the Radio Corporation. In 1929 the same threat in a new form prompted the Radio Corporation to offer for sale its birthright, as the surest way to meet the threat.

In 1928 the British dominions gathered at an Imperial Conference on Communications at London. Wilson was long forgotten, as the tide of nationalism ran high. The economic and military importance of knitting the Empire more closely together than ever before by cable and radio was iterated and reiterated. Fear of America in the field of international communications produced the very thing America feared—gigantic British consolidation of cable and radio facilities.

Cables & Wireless, Ltd. came into being a year later under the guidance of Lord Inverforth. Beginning life as Andrew Weir, Lord Inverforth won his wealth and his title from the sea. Senior partner of the Glasgow shipowning Andrew Weir & Co., he is now chairman of the boards of twelve large enterprises, ranging from air brakes to oil. Of the twelve, Cables & Wireless, Ltd., is by far the most important. Fused into the greatest operating group of international communications in the world were The Eastern and Associated Companies (Europe, Asia, Africa, Australia, and South America), the British Marconi and its subsidiaries on land and sea, the Government's "All Red Route" cable system across the Atlantic, Canada and the Pacific to the Far East, and the Government's "Imperial Chain" of beam wireless stations throughout the world. This merger was more than a unification of operating companies; it was also a huge investment company fortified with immense capital. By it Britain purposed to regain control of world communications.

Because of its expanding export business, because of the growing empire of the dollar, America was more than alarmed by the for-

[*Continued on page 142*]

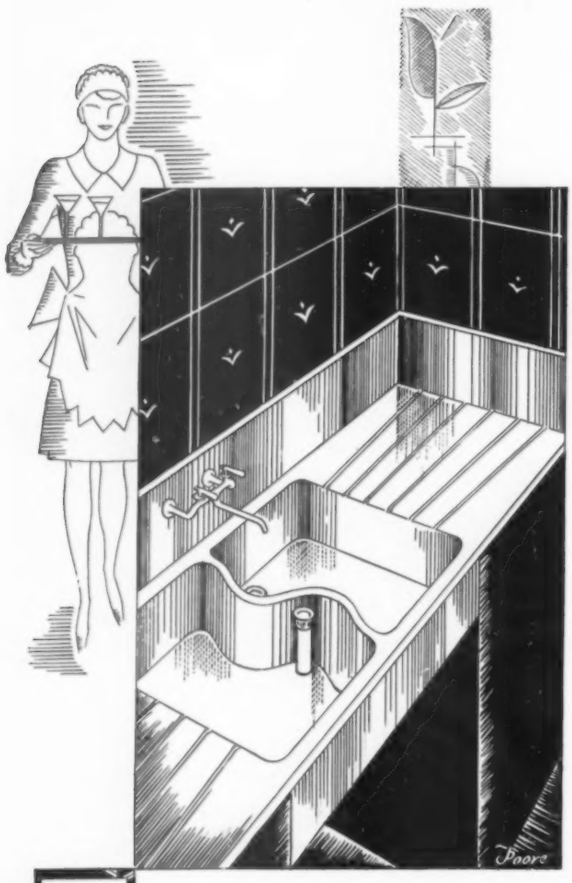


PROGRESS

Prairie schooner to airplane—magically has American Business advanced to swifter and more economical methods. Production, sales, and lately distribution have in turn come under the dispassionate eye of the engineer • • • General Box Engineers early discovered the shipping room as an unworked vein of profitable savings. Today a shipping case must be especially designed for the particular job it has to do—it must represent the best available thought on design and construction so that it will deliver its contents in good order at the LOWEST POSSIBLE TOTAL COST • • • This sort of experienced, unbiased thought General Box Engineers will supply for the asking. They have helped hundreds of firms in various lines lower shipping costs—among them, some of the largest manufacturing firms in the country • • • They will also furnish the facilities of two box laboratories—one in the East and one in the Middle West—to assist in applying correct principles to your specific shipping problem. We solicit correspondence on the subject.

GENERAL BOX COMPANY

44 WEST ILLINOIS STREET • CHICAGO ILLINOIS



THE imagination of the artist and the engineer's sense of utility meet in the new Butler's Pantry Sinks by Elkay. The gleaming surfaces of copper, white metal, nickel, crodon plate or monel metal are as beautiful as they are practical, and in a day when adequate entertainment demands impeccable service, such a fixture is indispensible. . . . . A letter will bring you detailed information.

ELKAY

4707-4717 Arthington Street
Chicago

mation of Cables & Wireless, Ltd. The patriotic arguments of 1919 for a strong American communications company were repeated in 1929 with equal force and applicability. Scattered American patents in 1919 crippled competition with the British Marconi Co. Scattered American companies might do the same thing ten years later in competition with Cables & Wireless, Ltd. Three great external communications companies—I. T. & T., Radio and Western Union—were held apart by the Federal law prohibiting mergers of radio and cable.

Not to get rid of a useless appendage to its great amusement enterprise but as a means of bringing about, on a larger scale than he ever dreamed of, the very thing President Wilson had in mind, the Radio Corporation now proposed to sell its communications business. Its officers were still patriots: once they had even contemplated buying from the I. T. & T. the thing that they most needed—an inland feeder system through Postal Telegraph—to complement their wireless service. Now instead they would sell, were it not for the law.

To Washington, then, went Mr. Young and Mr. Sarnoff. Before a Senate committee studying the whole communications field the Radio executives laid down a program of consolidation far more startling than the railroad plan which was at that moment announced. Not only should I.T.&T. buy Radio's communications business, but into the consolidation should be drawn the vast cable system of Western Union. Next might come the union of the great domestic telegraph systems whose duplicate services Mr. Young abruptly termed "expensive and archaic". Finally he visioned one unified communications service, whose energies and profits should be devoted not to competition but to research, whose power should be second to no other such group in the world.

Thus opened another act of the international drama which began to unfold its plot at Versailles. Many of the original actors are still in the cast: Behn and Alexanderson, Sarnoff, Young . . . None of these gentlemen, one hazards, would venture to forecast the end of the act, let alone the conclusion of this curious drama . . .

But one character the 1929 scene lacked to complete the cycle of comedy—a strong-willed gentleman who, through glittering glasses perched on a Louis XIV nose, could see the new situation and act upon it.

U. & U.
THE EMPIRE'S INVERFORTH, WHO LINKS SEA AND SKY

International
NEWCOMB CARLTON OF WESTERN UNION

SOSTHENES, CHIEF OF I. T. & T.'S BROTHERS BEHN

Wide World
THE U. S. CONTRIBUTED THOMAS NELSON PERKINS

ALERT IN THE MORNING...AT 3 O'CLOCK—*EYE-WEARY*

Examine your lighting facilities, then write the Edison Lighting Institute, Harrison, N. J., and we shall be glad to send you free bulletins concerning proper illumination in your particular kind of business.

YOU may wonder sometimes why people in your establishment begin to slow down in mid-afternoon. Possibly you notice that they seem restless or weary, or complain about having headache.

Such manifestations are frequently due to faulty lighting, which places your employees under a disadvantage *at your expense.*

Edison MAZDA* Lamps can always be depended upon to give the *full benefit of the current consumed.* It is advisable to use these tested lamps wherever good lighting is important.

*MAZDA—*the mark of a research service*

EDISON MAZDA LAMPS

GENERAL ELECTRIC

Advertisers who SELL known quality.. *now can buy it*

A woman never asks a merchant, "Is this Old Dutch Cleanser as good as that I bought last week?" . . . "Is this O-Cedar Polish the same as the down-town stores sell?" . . . "Will this package of Beech-Nut Bacon taste as good as the package I'm using now?"

Hundreds of items of merchandise are so uniform, so carefully kept to established standards, that their quality is unquestioned. No one investigates. No one compares. But when their makers come to advertise, how many newspapers can deliver circulations that match these products in their uniformity of quality? . . . In their nation-wide coverage of quick-action quality markets?

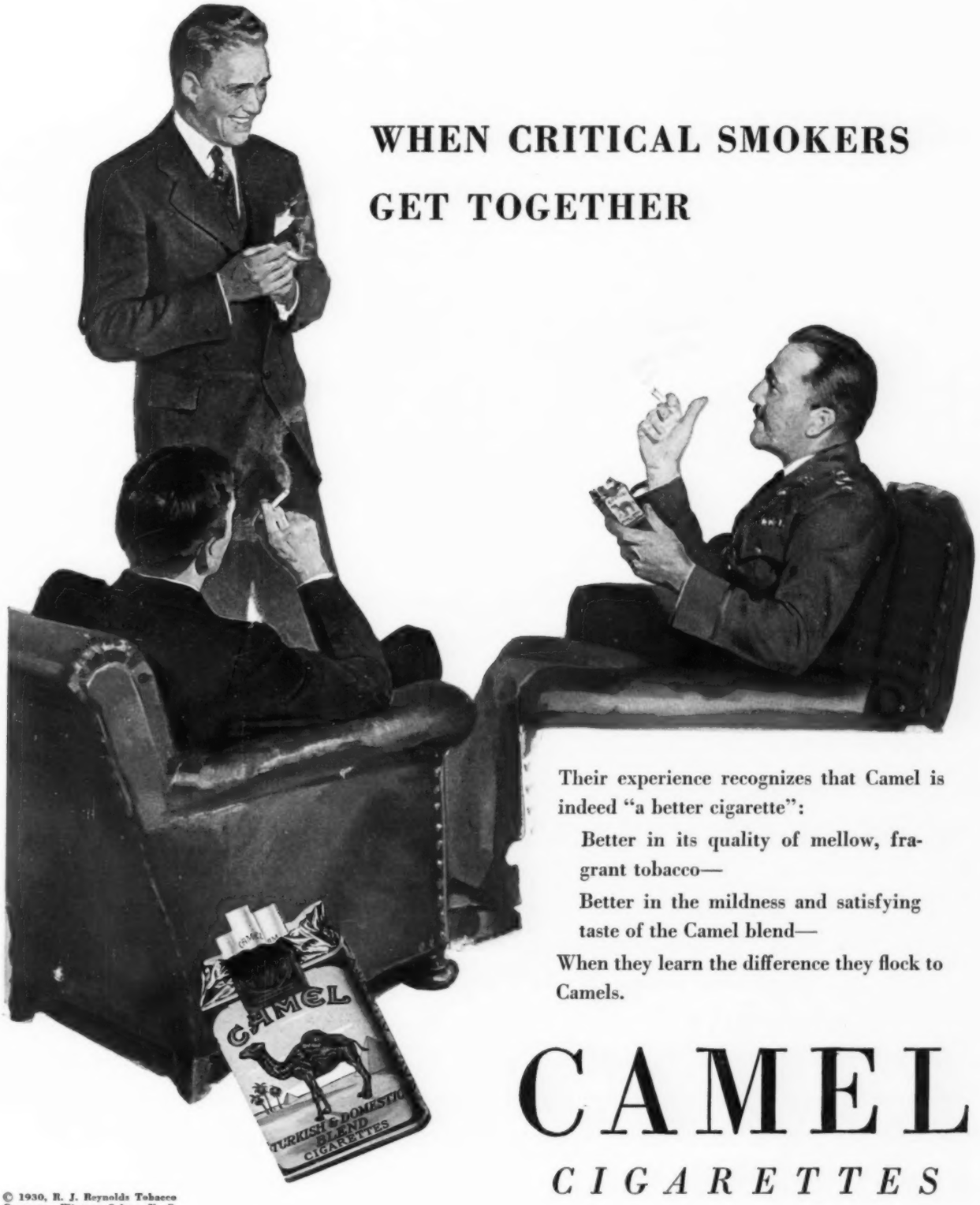
To such national advertisers, Scripps-Howard offers an advantage unique in the newspaper world . . . 25 newspapers, covering 25 buying centers, with a nation-wide uniformity of circulation. For SCRIPPS-HOWARD Newspapers have a common honesty of purpose. They are alike in their unquestioned devotion to the best interests of their communities. They are alike in their freedom from dictation and outside control, in their completeness of resources, in their quick and brilliant coverage of news. Naturally, they are alike in the quality of circulation, automatically selected, which each delivers to the advertiser . . . *Circulations whose values are as known, as uniform, as unvarying as the values in the national advertiser's own package.*

NEW YORK . *Telegram*	SAN FRANCISCO . *News*	BUFFALO . . . *Times*	COLUMBUS . . *Citizen*	HOUSTON . . . . *Press*	KNOXVILLE *News-Sentinel*	
CLEVELAND . . *Press*	WASHINGTON . . *News*	INDIANAPOLIS . *Times*	AKRON . . *Times-Press*	YOUNGSTOWN *Telegram*	EL PASO . . . . . *Post*	
BALTIMORE . . *Post*	CINCINNATI . . . *Post*	DENVER . *Rocky Mt. News*	BIRMINGHAM . . *Post*	FORT WORTH . . *Press*	SAN DIEGO . . . . *Sun*	
PITTSBURGH . *Press*	COVINGTON *Kentucky Post* —*Kentucky Edition of Cincinnati Post*	TOLEDO . . . *News-Bee*	MEMPHIS *Press-Scimitar*	OKLAHOMA CITY *News*	EVANSVILLE . . . *Press*	
			ALBUQUERQUE . . . *New Mexico State Tribune*			

SCRIPPS · HOWARD
NEWSPAPERS

MEMBERS OF THE AUDIT BUREAU OF CIRCULATIONS OF THE UNITED PRESS AND OF MEDIA RECORDS, INC.

NATIONAL ADV. DEPT., *Stuart S. Schuyler*, DIRECTOR, 230 PARK AVE., NEW YORK • CHICAGO • SAN FRANCISCO • DETROIT • LOS ANGELES • ATLANTA • PHILADELPHIA • BUFFALO • DALLAS



WHEN CRITICAL SMOKERS GET TOGETHER

Their experience recognizes that Camel is indeed "a better cigarette":

Better in its quality of mellow, fragrant tobacco—

Better in the mildness and satisfying taste of the Camel blend—

When they learn the difference they flock to Camels.

CAMEL

CIGARETTES

© 1930, R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

The Garden beckons to Big Business

Once in the dim dark ages of advertising, a bright publisher conceived the radical idea that women were really interested in clothes. So he published a fashion magazine. And it grew—and grew—and grew. Just because it met a fundamental need. Of course advertisers of those days looked askance. Advertise foods in a fashion magazine? How extraordinary! You see it really does take some time for even a very good idea to sink in. The garden has become the mark of caste—the caste of the men and women who love their homes, who work and spend to improve them. When Better Homes and Gardens struck its editorial keynote seven years ago, thousands of home-minded families were waiting for just such a magazine. Both men and women wanted a magazine which would talk to them through their hobby. They wanted a magazine devoted exclusively to "how-to-do-it" articles on garden planning, on home building, on interior decoration, on the cooking which is so important a part of good living. So Better Homes and Gardens has grown—and grown—and grown. Just because it has met a fundamental need. Now it reaches a million, three hundred and seventy-five thousand families—97% of whom own their own homes. 77% of these homes are in cities, towns, and suburbs within retail trading areas of cities over 25,000. For advertisers, Better Homes and Gardens has created an overwhelming opportunity. It has editorially selected and brought together, in unparalleled concentration, the people who are perhaps the most responsive and responsible buyers in the world—owners of prosperous homes, with gardens. Truly, the garden does beckon to Big Business, just as the fashion magazine once beckoned.

BETTER HOMES AND GARDENS, DES MOINES, IOWA

XUM

Island Kingdoms

Continued from page 67

range through the woods. It was not so long ago that the annual deer hunt was a feature of the season on Naushon. Six power boats, two cruising schooners, and a steamer keep up connection with the mainland. A baker's dozen of Forbes families come to their island every summer. Though many guests are entertained on Naushon, it is an unwritten rule that every one of the houses that are strung out along the seven mile stretch of the island is occupied by a member of the family. There is no selling, renting or giving of island property to outsiders.

The Forbes tribe of Boston has no connection with *Forbes Magazine* nor with Forbes & Co. (New York real estate), but practically every other important business figure of that name belongs to the tribe. W. Cameron Forbes, once Governor-General in the Philippines, is referred to as "the governor" by the Forbes families that summer on Naushon. He is a senior partner of J. M. Forbes & Co., long-established mercantile firm of Boston. Other eminent Forbes include: Allan Forbes, President of Boston's State Street Trust Co.; Edward Waldo Forbes, for twenty years the director of the Fogg Art Museum at Harvard; Dr. Alexander Forbes, member of the faculty of Harvard Medical School; J. Grant Forbes, a foreign director of Blair & Co., whose eleven children insure that the line will not die out in this generation.

Dominant among Forbes ancestors is John Murray Forbes. His firm was, and is, notable among Boston mercantile houses; he shared in the founding of the Chicago, Burlington & Quincy Railroad. In 1857 he bought Naushon Island, over which he presided in much the same patriarchal manner as does the present "governor". Ralph Waldo Emerson, a guest at Naushon, wrote of his host: "It is a matter of course that he should shoot well, ride well, sail well, administer railroads well, carve well, keep house well, but he was the best talker of the company. . . . I divided my admiration between the landscape of Naushon and him." This praise rings the more true in view of the fact that Mr. Emerson was extremely seasick on the trip to the island.

The Republic of Middle Brewster

When the late Melvin Ohio Adams, owner of one of the country's shortest and most profitable railroads, the Boston, Revere Beach & Lynn, wanted to reach his middle Brewster Island in Boston Harbor, he set sail in a dory, "The Leviathan". Today his son, Karl Adams, who lately sold the family railroad, can commute between his Tremont Street law office and Middle Brewster, ten miles away, by power boat. He claims his island is in effect a republic: the Federal Government seized it in war days, but released it with the coming of peace; the Commonwealth of Massachusetts collects no taxes, has no jurisdiction on the island. The Adams republic is a great twelve-acre rock bearing on its face enough verdure to give it an emerald complexion. At night the nearby Boston Light, the country's first sea beacon, sweeps great bars of light across the island, sounds a dismal fog signal when it is stormy.

Orchids and Copper

Owned by Harvard University, leased to onetime copper king Albert C. Burrage, for a term of 99 years, Bumkin Island is another of the landmarks of Boston harbor. It too was used by the government in war days—a possibility which every island emperor must anticipate. Up to that time Mr. Burrage maintained on it a hospital for crippled children. Of late his interests have turned towards horticulture; his superb orchids have kept him in the President's chair of the American Orchid Society since 1921. South America's Brazil is the land of orchids, and her Chile is preëminent among copper lands. A score of years ago Mr. Burrage and H. H. Rogers, late great Standard Oilman, foregathered and put through that Amalgamated Copper deal which inspired denunciations of the fieriest nature, among them Thomas Lawson's book on "Frenzied Finance". In 1913 Mr. Burrage organized the Chile Copper Company, a holding company to take over the properties of the Chile Exploration Company, whose mines were the largest known body of copper ore in the world. He interested the Guggenheim brothers, and they invested heavily. Since 1923, when Anaconda purchased a controlling interest in Chile Copper, Mr. Burrage has not been active in business. What he will do with his island is uncertain: perhaps he will

This WACO "225" Straight-Wing won the 1929 National Air Tour with a perfect score for reliability. Send for copies of booklets describing the ship and the Tour. Let us arrange a flight at your convenience . . . and for your satisfaction.

AND AGAIN IN 1929

IN 1928, WACO won the National Air Tour by a wide margin of points. And in 1929 it eclipsed its brilliant performance of the year before . . . winning still more decisively . . . *proving* its ability to do five things better than *any other ship.*

The official figures speak for themselves. The winning WACO in 1929 carried the full Dept. of Commerce type certificate useful load of 972 pounds over the scheduled route of 5,017 miles at an average speed of 130.8 m.p.h. It landed and stopped in 3-4/10 seconds . . . took off in 4-4/10 seconds . . . *less than 100 feet!* And it did all these things with a 225 h.p. Wright "Whirlwind" motor.

These figures are typical of everyday WACO performance . . . performance that has made WACO the most popular make of commercial aircraft in America today.

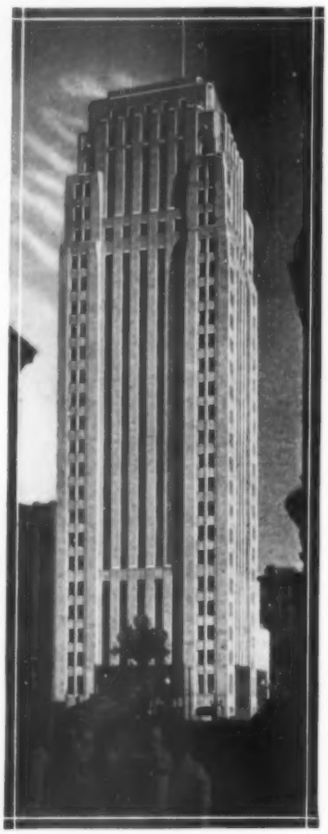
Isn't this the type of ship that *you* would like to fly? Write for complete information.

THE WACO AIRCRAFT COMPANY, TROY, OHIO

WACO AIRPLANES

"ASK ANY PILOT"

THE RAND TOWER
MINNEAPOLIS



Men or industries serving the seven million people in the Ninth Federal Reserve District, and seeking an effective business address, may well consider the new Rand Tower in Minneapolis. ¶ Located at the very heart of the Minneapolis financial and business section, the Rand Tower offers distinct advantages to firms of national scope using a Northwest address. Efficient office space, an association with names well known in the Northwest, a location of prestige . . . these are a few of the many considerations. . .

THE RAND HOLDING COMPANY
A UNIT OF
RAND COMPANY
MINNEAPOLIS

use it as a base for his 260-foot yacht, the Aztec, on which he went cruising last summer.

Virginia

Patriarch of Property

That the oldest piece of property in America in the possession of the original owning family should be an island is to be expected. The kaleidoscope of shifting times and customs whirls at a slower pace in such isolated regions. In the year 1635 a large island in the James River was granted by the Crown to Captain Francis Eppes, a member of the Colonial Council. Today the island is the property of the captain's descendant, Miss Mary Eppes. For nearly three centuries her family has remained in tranquil possession of their island, undisturbed by the successive movements in land values that have again and again transformed the mainland.

Oysters

Assateague Island was once the home of a warlike Indian tribe of that name. In 1659 this belligerent tribe was unlucky enough to have a disagreement with a Colonel Edmund Scarburgh, who was the Miles Standish of the Virginia coast. In consequence the Assateagues hastily went away from there, leaving the island to the white men. The latest paleface usurper of Assateague is Samuel B. Field, of Baltimore, who manufactures men's clothing. As he rides along his twenty miles of surf-bordered beach, his ponies often kick from the sand an Indian tomahawk or arrowhead. In the marshes, tidal lagoons, and salt creeks that net the island, large flocks of wild fowl find protection, and along the hard beaches range the famous Chincoteague ponies and beach cattle, wild and undisturbed. Domestic stock-raising is equally flourishing: Mr. Field has over two hundred head of saddle ponies and a large herd of Hereford and polled Angus cattle. To bivalve fanciers, however, the existence of Assateague Island is justified not by its cattle or wild fowl but by the luscious oysters, famed for decades, that are gathered in one of its reaches known as Tom's Cave.

North Carolina

Communism

Mrs. A. Hoffman has spared no pains to protect her Bogue Island from natural and human injuries. Each tree around her handsome, curiously wrought house bears a lightning rod. Hardy would be the picknicker who rowed out from the mainland, for he would run the risk of being shot at by armed guards. Autocratic, exclusive Mrs. Hoffman walks through her forests disturbed only by grey curtains of Spanish moss swaying in the wind off the Atlantic. If her walk takes her, however, to the north end of her seventeen mile island, her calm is shattered. For there reposes the fly in the Hoffman butter, the thorn in the Hoffman side: the small fishing village of Salter Path. Its population of 171 souls have no title to their land except that of immemorial usage. Not a man in the town owns the house he lives in. No one owns it. Everyone owns it. The men go deep sea fishing and divide the catch share and share alike, as they have done for two centuries. Picturesque as this primitive communism may be, it does not intrigue Mrs. Hoffman, who insists that she and not the fishermen owns the island. They retort that they have lived there before there ever were Hoffmans and that, God willing, they will live there until that happy state of affairs comes about once more. Winters, Mrs. Hoffman amuses herself by trying to dispossess her neighbors, who cling to their Salter Path like limpets to a rock. After the inevitable failure each year, she goes off to Paris and forgets as much as possible her tenacious tenants.

The Squire

Did the inhabitants of Currituck County know the usages of old England, they would probably call Joseph Palmer Knapp "the Squire". When Mr. Knapp bought Knott's Island from Thomas Dixon, whose novel "The Klansman" was transmuted into D. W. Griffith's "The Birth of a Nation," he thought he was merely acquiring a place to shoot ducks. It was not until he was arrested by a native game warden for shooting too many ducks that Mr. Knapp realized that the region was inhabited. When an ignorant but earnest county magistrate fined him $25, Mr. Knapp first grew angry, and then interested. So far he has spent twenty thousand times that amount on the county school system, which is one of the finest in the country. He can well afford $500,000 school systems, being Chairman of the Executive Committee of the Crowell Publishing Co., which puts out the *Woman's Home Companion*, *Collier's Weekly*, and the *American Magazine*. To his surprise, he has found that he likes the people of the region and

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ADVERTISERS INCORPORATED, 7310 WOODWARD AVENUE, DETROIT

LEE ANDERSON, President

B. A. McDONALD, Vice-President and Treasurer

A MERGER

of interest to people who sometimes mislay or forget things

If we all had perfect memories there would still be plenty of reason for Tek's popularity. Since most of us are still a shade off perfect, reasons are overshadowed by necessity and Tek becomes an essential to the art of pleasant living.

Events leading up to the merger

When you clean your teeth do you always remember to give your gums their exercise? They enjoy it. Do you never forget to use dental floss for the tight spaces between the teeth? Two extra memorabilia for a refreshed mouth. Cleaning, massaging and dental floss have been merged in Tek.

A better brush at both ends

Tek combines in one unit: 1—a small, springy brush-head that gets nimbly around your mouth; 2—extra width in the brush-head which automatically, at every brushing stroke, invigorates your gums; 3—two months' supply of dental floss always at hand in the handle—you can't mislay or forget it. Tek is a product of the world's largest makers of dental and surgical dressings.

Johnson & Johnson
NEW BRUNSWICK NEW JERSEY

Tek
the modern
TOOTH BRUSH

Tek is made in two models: as illustrated or with a plain flat handle, no floss. In five colors of Lucite (black, red, green, blue, yellow) or amber. Tek Jr. for the children.

that they seem to like him. In his handsome island mansion he employs all native help, down to the cooks and scullery maids. When he is able to escape from his publishing duties and get down to his island, Mr. Knapp spends some of his time shooting and the rest in hectoring the county into progress.

Georgia

Millionaires

Until two hundred wealthy families, including the Morgans, the Drexels, the Goulds and the Rockefellers founded the exclusive Jekyll Island Club, the romantic seacoast of Georgia was almost unknown. Attracted by Jekyll's broad, smooth beaches and its natural yacht basin, and also, no doubt, by its seclusion, the founders of the Club took the first step in the development of this forgotten region. Today the Georgian seaboard is the winter playground of the du Ponts, the Carnegies, Henry Ford and many another wealthy family.

The President

A year ago Sapelo Island, the estate of Howard E. Coffin, Detroit automobile power, was known chiefly to friends of its owner. But last Christmas Mr. Coolidge was a guest at Sapelo. The public saw and heard him, via the talkies, as he moved slowly along mossy roads in a creaking oxcart, rifle at rest on the presidential arm. And the public learned, via the newspapers, that he had good hunting in Mr. Coffin's well-stocked forests, that he enjoyed his stay in the large Spanish mission residence, and that Mrs. Coolidge disported herself gaily in the blue-tiled, glass-domed swimming pool. Thus did an island become the focus of a nation's curiosity.

Slaves

Last June, C. M. Keys, head of the Curtiss aviation interests, became chairman of the $70,000,000 company which includes Curtiss, Wright, etc. Mr. Keys bought St. Catherine's Island, just north of Sapelo. Associated with him in the purchase were Mr. Coffin and J. C. Willson, also an important figure in aviation. They intend to use it as most Georgia islands are now used, as a playground. St. Catherine's is more of the past than of the present, its title being as ancient as any in the state. In 1566 Adelantado Menendez claimed the island for the King of Spain and settled on it Jesuit missionaries. Its owner in revolutionary times, a half-breed Indian woman, Mary Bosomworth (née Princess Coosaponakesee), sold it to Button Gwinnett, who later immortalized himself by signing the Declaration of Independence—and very little else. So rare is his signature, by far the rarest of the signers, that a collector paid $52,000 for it a few years ago. Though the island has changed hands several times since the expensive Mr. Gwinnett, the acres of virgin forests and white beaches remain the same. Surrounded by cotton fields stand the old slave quarters, square barrack blocks that face each other across the "street". Old-style Southern darkies, who think in terms of "the Boss" and "the chillun" still live in the quarters that once sheltered their slave fathers and grandfathers.

Florida

Romance

On the Admiralty charts it is Salt Cay Island, but to the McCutcheons and their guests it is Treasure Island. In 1916 John T. McCutcheon, whose cartoons appear every morning on the first page of the Chicago *Tribune*, was looking around for what he vaguely described as "a tropical island in the pirate belt". Salt Cay seemed to meet the requirements, and so he promptly bought it, sight unseen. Today it has many of the characteristics of a pirate island of the orthodox romantic type. Some of these are natural, such as caves, grottoes, reefs, coral beaches, lagoons and savannahs. Artificial embellishments, mostly the inspiration of the McCutcheons and their guests, are a stone watch tower, a fort with ancient cannons, "the residency", and the customs house, which is embellished with McCutcheon murals on pirate themes. The easy flow of existence on Treasure Island is apparent from the privately-printed "Island Song Book", which gives as the island anthem, "Too Late but Never Mind". The indolent Treasure Islanders are also fond of harmonizing "O Sole Mio", "Never Take the Doorknob from the Door", "The Microbe's Serenade", "That Old Time Religion" and "Love's Old Sweet Song". In the Island Song Book the late Bert Lester Taylor wrote of the star, Canopus:

"When men are calling names and making faces,
And all the world's ajangle and ajar,
I meditate on interstellar spaces
And smoke a mild seegar."

Choose Your Insurance Company

as Carefully as You Choose Your Bank

IN selecting your bank, you choose for strength, for safety, for service. The same important considerations should govern the placing of your insurance. The safety of your business—in emergency—depends upon the strength and safety of the insurance companies chosen to protect it. And service, from your insurance company—when needed—is absolutely vital.

Shrewd Business Men Choose CENTRAL

CENTRAL is a mutual company—one of the largest and strongest in the United States engaged in a general fire insurance business. Measured by any test of solvency, its strength is unquestioned—its policies absolutely safe. Organized in 1876, it has a record of over fifty years of fair adjustments and prompt settlement of claims. Careful selection of risks and conservative management have made it possible to return a substantial dividend to policy-holders—30% for the last eight years—a definite saving in insurance cost.

Significant Figures from Financial Statement of July 1, 1929

Total insurance in force	$373,157,824.00
Total assets	4,023,993.00
Cash surplus	2,036,749.00
Losses paid in 1928	1,063,450.00
Losses paid from organization to July 1, 1929	13,249,859.00
Dividends paid in 1928	736,190.00
Dividends paid from organization to July 1, 1929	6,481,906.00

"An old line, legal reserve, dividend paying mutual fire company."

CENTRAL offers this strength, this safety, this service—and this saving—to individuals or corporations whose business or property can qualify as first-class in moral and physical risk. Full information on request.

Organized 1876 — *The* CENTRAL — *A Friendly Company*

MANUFACTURERS MUTUAL INSURANCE COMPANY
VAN WERT, OHIO

FIRE, AUTOMOBILE AND TORNADO INSURANCE FOR SELECT RISKS

A clip of the Scissors.. a Stamp...and 12 minutes

. . . may save $20 on every $100 you spend for paper

INVESTIGATION shows that many firms can save fully 20% of their annual expenditures for record paper and correspondence paper and yet obtain greater security for their vital records — greater impressiveness and prestige in their letters.

For considerably less than you probably pay at present — surely at no *additional* cost — you can be certain that your valued records and documents will withstand the destructive action of time and constant use — that your business and professional stationery will have the impressive character and dignity which befit your correspondence.

A straightforward brochure — brief, concise, direct — tells busy executives just how this can be done. It takes but a few minutes' reading time. Yet it answers such questions as the following:

"How can I be *certain* that my vital records and documents will endure as long as they should — that they are not insidiously disintegrating with time?"

"How can I *know* that my stationery possesses the quality and character which its importance demands?"

"How can I attain both these results without increasing my annual paper costs — perhaps at a worth-while saving?"

Have your secretary clip and mail the coupon below. A copy of "Certified Papers" will reach you promptly. It will take but a few minutes' time to learn several facts of vital importance to your business. L. L. Brown Paper Co. Adams, Massachusetts.

L. L. BROWN Certified PAPERS

. . . for the protection of whatsoever is valuable

L. L. BROWN PAPER CO., Adams, Mass.
Send a free copy of "Certified Papers." This entails no obligation whatsoever on my part.

Name _____

Address _____

City _____ *State* _____

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It is for the observation of this soothing star that the Watch Tower was built, though the song book hastens to add in a footnote: "Canopus is visible from all parts of the island."

California

Fiat Insula!

Thus pronounced last winter the wealthy M. F. Bramley, as he cruised off lower California seeking a likely site for an island. By spring he had found his site, revealed to him in a dream, and was ready to start operations. He will build a circular breakwater and make an island within it by the simple process of pumping water out of the enclosure and sand into it. A contractor of wide experience, and fortified with a staff of technical experts, Mr. Bramley expects to build his island with little difficulty. He was forced to the heroic measure of creation because he wanted an island off southern California. With the exception of Santa Cruz, Santa Rosa (see below), and Santa Catalina (see below), all the islands in the region are owned by the government. If Mr. Bramley had been content with an Atlantic seaboard island, he could have had his pick of thousands, tiny and great. When his isle is built, however, Mr. Bramley will eclipse all other island monarchs, whether in California or in Georgia. He will be not only monarch but also creator of all he surveys.

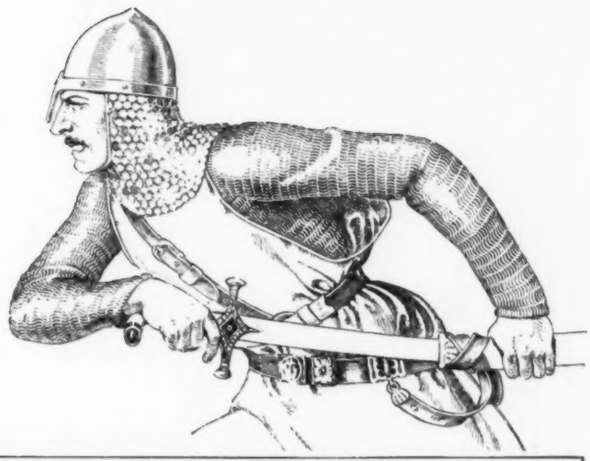
Gold Mine

When William Wrigley Jr. bought Santa Catalina Island a few years ago, he was buying what was literally and figuratively a gold mine. Literally, because four Wrigley mines are exploiting the island's deposits of gold, silver, lead and zinc. Figuratively, because lavish improvements and even more lavish publicity draw thousands of people from Los Angeles to spend a gay week-end on the island. Twenty-three miles of Pacific water separate Catalina from Los Angeles Harbor, but Mr. Wrigley has set a $1,000,000 steamer to carrying holiday-makers back and forth. Other bright ideas are a large and luxurious hotel, a golf course, numerous tennis courts, and an airplane landing field. Mr. Wrigley wanted his pet island to have the largest ballroom in the country, and so he set about building a theatre with a dance palace above it. Incomplete, the structure has passed the $2,000,000 mark; its dance floor will contain 18,000 square and about 10,000 human feet. A sizable foothill known as Sugar Loaf blocked out from incoming steamers the view of this palace. Mr. Wrigley is having it removed and dumped deep into the blue Pacific. There is a great deal of method, however, in the Wrigley madness. Whatever he tackles, whether it be a summer resort or a baseball club, he makes it pay; and the $2,000,000 which he paid for Catalina is turning out to be a good investment.

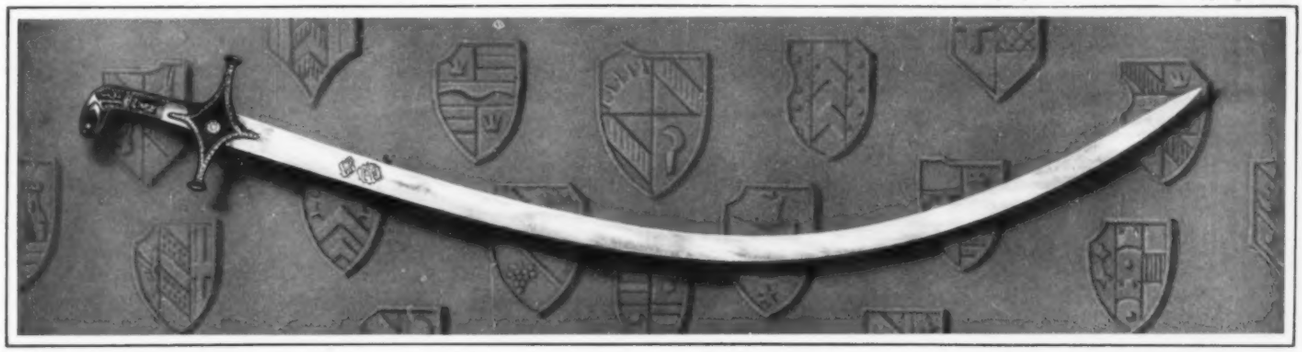
The Late Mr. Valentine

A sort of addendum to Catalina, a postscript of two acres, White Rock Island has long been as obscure as the conventional violet by the mossy stone. In 1925 the feminine curiosity of Mrs. Helen K. Morton led her to peer into its status. When she found that the existence of White Rock was recognized neither by real estate agent nor by government map, her feminine sympathy was aroused and her equally feminine intuition told her that here was opportunity. Though the U. S. Land Office was very sceptical about White Rock, it was finally brought to the point of admitting its existence. "What will it cost me?" asked Mrs. Morton, but the Land Office held up an official hand. Being without an owner the land became public domain; and public domain was not for sale. The usual way to acquire it is by "homesteading", but Mrs. Morton disliked the idea of living three years on a two-acre table of rock. Then she heard of the late Mr. Valentine. In 1846 a friend assigned to him some 13,400 acres of land, but so dilatory was Mr. Valentine in filing claim with the government that he found himself squatted out of his holdings. The late Mr. Valentine thereupon raised so loud an outcry that the government gave him scrip, or certificates, entitling him to 13,400 acres of public domain anywhere in the country. Shrewd, lazy, he took up no acreage; instead he sold his scrip bit by bit to people wishing to acquire land from the government. Though very little Valentine scrip remains unredeemed, Mrs. Morton unearthed several acres of it in the hands of one Jacobs, in Colorado. Presenting it to the Land Office, she received patents to White Rock. Feminine to the end, she does not know what to do with her island now that she has it. Says this beneficiary of the late Mr. Valentine: "I never owned an island before. It seems even now that it may be the result of a belated reading of 'Cinderella' and an indiscreet rarebit. I am quite

Even the finest steel of old Damascus...



XVII Century Damascus sword now in the Metropolitan Museum of Art, New York



...could not equal the special steel in *Simonds* fine cutting tools

TREASURED by kings and warriors of old, weapons of finest steel were often the proudest possessions of an empire. Yet even the steel in the famous Damascus blades cannot equal the special alloy steel used in Simonds products.

With medieval swordsmiths, the choicest blades were the result of patience, perseverence... and luck! Today, Simonds uniform alloy steel is the product of scientific methods, modern facilities... and precision.

Each step in the making of Simonds electric furnace steels is controlled by specialized knowledge aided by the most complete equipment known in the steel industry. In the Simonds research department, metallurgists are constantly making tests to insure uniformly high quality. Simonds pioneered in developing the special cutting steels demanded by present-day production methods.

The perfection of Simonds electric furnace steel was the answer to the problems of maintaining the exacting standards of quality and uniformity for Simonds products. Consequently the name, Simonds is recognized as a mark of perfection... the symbol of modern master-craftsmen... just as years ago the initial of the Damascus sword-maker meant unquestioned superiority.

SIMONDS SAW AND STEEL COMPANY

Boston . . Mass.
Memphis . Tenn.
Seattle . . Wash.
Chicago . . Ill.
Detroit . . Mich.
Portland . . Ore.
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Atlanta . . . Ga.
San Francisco. Cal.
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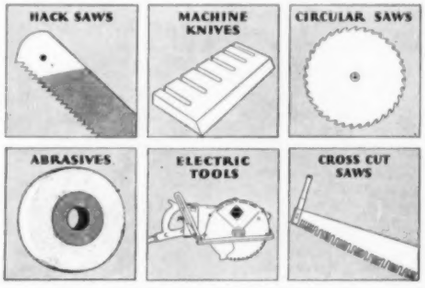
Established 1832 . FITCHBURG, MASS.

PRODUCERS OF *Circular, Band, Metal, Cross-Cut, Gang and Drag Saws; Machine Knives; Files; Hack Saw Blades; Tool Holder Bits; Saw Tools; Discs; Steel.*

AFFILIATED COMPANIES

WAPATT, INC., Pittsburgh, Pa., *Manufacturers of Portable Electric Saws and Tools* ~ THE ABRASIVE CO., Philadelphia, Pa., *Producers of Abrasive Grinding Wheels and Polishing Grain* ~ SIMONDS GUARANTEED CUTTER-HEAD COMPANY, Seattle, Wash., *Manufacturers of Guaranteed Cutter-Heads.*



SIMONDS INDUSTRIES
World's Largest Saw Makers

BACK OF THE EDGE..THE STEEL . . . BACK OF BOTH..SIMONDS

Admiration—The final touch to a perfect shave

ROLLS RAZOR

The ONE BLADE Safety

IF testimonial copy were being used in the presentation of Rolls Razors to the men of America, innumerable pages could be filled with unsolicited letters of commendation written by representative business men from all parts of the country. Among them are a few who stated that the Rolls Razor advertisements are entirely too modest in their claims.

These sincere tributes will not swerve us one iota from our belief that the truth simply told about an article of real value will bear more weight, with the thinking man, than pages of glowing generalities.

From actual tests, as well as from the spoken and written words of hundreds of others, we know that the one hollow ground Rolls Razor blade of finest Sheffield steel will give a clean, smooth, non-irritating shave, and will continue to do so for years.

No longer will you have to try your patience and waste your money continuously purchasing innumerable packages of good, bad, or indifferent blades.

The first cost may be slightly higher—but *how many blades do you buy a year?*

Ask your dealer to explain the Rolls Razor way and your shaving worries will be over forever.

Imperial No. 1 Silver Plate $15.00
Imperial No. 2 Nickel Plate $10.00
De luxe gold sets and Travel Kits priced up to $32.50

We recommend Imperial Rolls Shaving Soap in hygienic, indestructible bowl for a superior shave. Priced at $1.50. Or Rolls Shaving Cream. Priced at 75c.

For sale at the better shops throughout the world

Descriptive Folder Sent on Request

LEE & SCHIFFER, Inc. U. S. Distributors
Dept. F.—11 East 44th St., New York City

COMPACT
Complete in its case—Razor, strop and hone.

THE ONE BLADE
of finest Sheffield steel and hollow ground, is stropped in its case before shaving and honed in its case when necessary. Properly handled, it will give a lifetime of perfect shaves.

READY FOR SHAVING
Simplicity itself—just the one blade and its handle.

frankly undecided what to do with it and am open to suggestions."

Livestock

Californian island though it is, Santa Rosa has a chilly climate. Most of the year the Northwestern trade winds ripple the long grass on the low, rolling hills of the island. This grass is important to the proprietors of Santa Rosa, the five Vail brothers of Los Angeles, because it feeds their sheep, cattle, saddle horses. They have made the island into a sea-girt Wild West ranch, whose rolling pasture lands are surrounded by salt water instead of prairie. In the steep, rocky canyons that cut across the hills the herds find fresh water. Except for a few acres of vegetables and some barley fields for the saddle horses, there is no cultivation on Santa Rosa. All is given over to stock raising: the brothers Vail have built two ranch houses, four stock barns, corrals and a wharf from which to ship the stock to the mainland.

The Princess of Golondrina

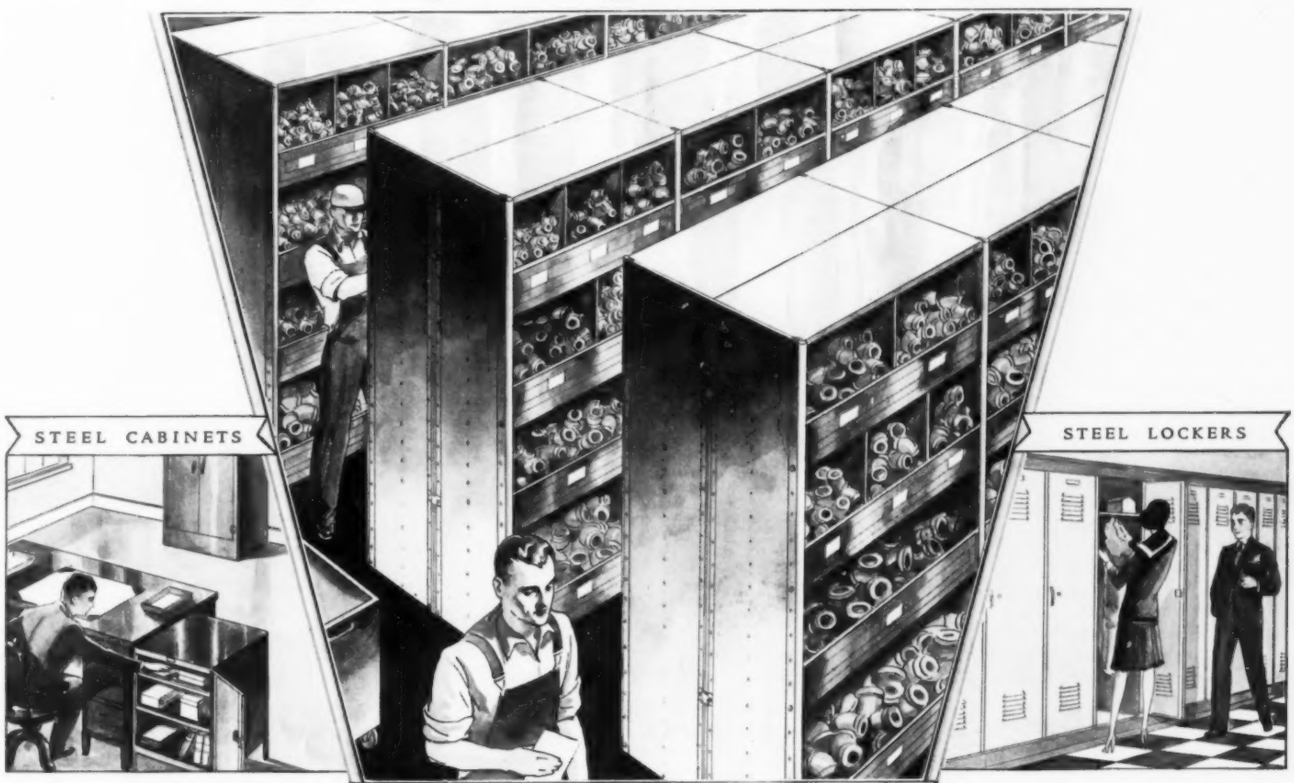
Desiring the proper background for her writings on the old Chinese Imperial court, the wealthy Princess Der Ling created it on her own island. Three years ago she leased from Mexico the tiny island of Golondrina, off southern California, and set up a court of 150 retainers with 20 American ex-Marines as a palace guard. All day she worked on her memoirs, amusing herself in moments of relaxation with "command performances" by singers and dancers of every nationality whom she had summoned to the palace. Order was kept by the husky ex-Marines, who patrolled the grounds day and night under the command of Arthur Burks, once a lieutenant in the Marine Corps, who was rumored to have rescued the Princess from a revolutionary outbreak in China under highly romantic circumstances. Keeping order among 150 women of various nationalities was no sinecure, nor was the duty of putting the dancers through setting-up exercises at 7:15 a.m. especially attractive. At long intervals the Princess would hold court in the most impressive manner, all her attendants, even the leathernecks, being rigged out in elaborate Chinese robes of ceremony. Ascending her gilded throne, the island potentate pronounces final judgment on any misdeeds that might have taken place, and arbitrates the inevitable hair-pullings and face-scratchings among her retainers. The judicial proceedings over, dancers, French, Spanish and Chinese troop in and go through their performances; a fancy drill by the marines, in red and black costumes, ends the official program. Slipping off her stiff court costume, the Manchu princess stands revealed in a French evening gown. As an American jazz orchestra strikes up, all formality disappears, and soon the ladies-in-waiting are dancing with the marines or any visitors who happen to be staying with the Princess. In the end, however, this little kingdom was dissolved by its creator as easily as she had built it up. Her book was finished, and she was growing weary of the endless intrigues and quarrels of her court. So the Princess went off to Los Angeles and her costly heirlooms journeyed to the vaults of California banks. A hundred servants remain in her palace, ready to set up for the Princess once more her toy-theatre Chinese empire.

Washington

Suburban Wilderness

The island birthplace of the Indian chief, Seattle, barely eight miles from the city of that name, remains today in about the same natural state as when the great chief was born on it. When Captain Vancouver, of the British Navy, discovered the island in 1792, he neglected to name it, and as a consequence it has been known variously as "High Island", "Smugglers' Island", and "Blake Island". About twenty years ago the post-office settled the matter by dubbing it "Trimble Island," after its owner, William Pitt Trimble, a retired Seattle lawyer. Last month Mrs. Trimble was drowned in Elliott Bay, near Seattle, when her car was driven off a dock into the water. Her husband and two sons escaped, after vain efforts to rescue her. The deer around Puget Sound know Trimble Island as a refuge, and they swim for it when the hunting season begins. Others besides the deer would like to take refuge on the island: often in the dead of night the Trimbles hear the subdued sound of boats, usually from Canada, boats that carry no lights and do not welcome the curious on board. Sometimes there is a whisper of muffled oarlocks and a keel grates slightly on the beach, though three caretakers see that this does not occur too often. Some day Mr. Trimble will present Trimble Island to the city as a municipal park, a green fragment of nature surviving in a world of progress and subdivisions.

To *make your floor space* MORE *productive*



Greater earning power from each square foot of floor space is vital to manufacturers, wholesalers, retailers, institutions. To store more stock on the same space—to increase sales at lower cost—to speed up the handling of materials and merchandise—to secure better stock control—these are problems common to producer and distributor. . . . One of the many Lyon products that will help your floor space earn more is Lyon Steel Shelving. In many cases the careful arrangement of shelves, bins and dividers to exactly fit the materials or supplies to be stored will save 20% to 40% floor area, and increase stock room efficiency. All parts are standardized and interchangeable, so that the shelving can be easily adjusted or expanded to meet changing conditions. Especially important is the fact that the initial savings you make by installing Lyon Steel Shelving will continue year after year. . . . You will find at the bottom of this page other Lyon steel products helpful in storing and displaying goods to better advantage. Whatever your business, Lyon will be glad to talk over with you, without obligation, the possibilities of more profitable and effective use of your floor space. This service is backed by thirty years of specialized experience and study in the storage and display of goods. Representatives in all principal cities await your call. Factories and warehouses are well located to give you prompt service. . . . Write for book, "Cutting Costs with Steel Storage Equipment." Or, if you are a retail merchant, ask for "Lyon Store Furniture and Fixtures," illustrating the most modern developments in store equipment.

LYON METAL PRODUCTS, INCORPORATED
AURORA • ILLINOIS

LYON

STEEL STORAGE *and* DISPLAY EQUIPMENT

Standardized Steel Shelving
For stockrooms, toolrooms, warehouses. Sold through Engineering Sales Offices in principal cities.

Steel Lockers of all Types
For businesses, schools, clubs and other institutions. Sold through Engineering Offices in principal cities.

Storage and Wardrobe Cabinets
A complete line and price range for every business, institution and home. Sold by Office Equipment Dealers.

Automotive Store Equipment
Steel shelving, counters, display cases, lockers and shop equipment for all automotive dealers. Sold by Automotive Jobbers.

Store Furniture and Fixtures
Display shelving, merchandise tables, counters, show cases. Sold direct by specialists in store furniture and fixtures.

XUM

Salt Lake City and San Francisco.

As complete as this are the records of every item of expense. With equal ease Mr. Schuyler could tell you that on January 20th the steward ordered and received 270 dozen eggs, of which 100 dozen were Hennery Browns, 170 Hennery Whites, that on the same day he ordered and received a ton of meat, of which 400 pounds of the cheapest cost 15 cents a pound, and 60 pounds of filets cost 93 cents a pound. Even more surprisingly, Mr. Schuyler, anticipating customary breakage, would know how many barrels of ice-tea glasses would be needed in June, in August, in September.

Like an army

Obviously, it would be impossible for Mr. Schuyler himself to superintend the activities of the numerous persons who do his housekeeping and cooking and washing and bookkeeping, and of the servants who minister to the servitors. Wherefore he must organize his force like an army with commanders and liason officers appropriate to each branch of the service. Only thus can he bring about any sort of coordination in a household that contains such disparate elements as a chapel for meditation, a laundry where 30,000 pieces of household linen are washed every day, an atelier

The Biltmore's Profit

(*Continued from page 76*)

where pastry-cooks may on special occasions be called upon to build bells of candy and drydocks of sugar, a smithy where new bottoms are brazed on old copper kettles, a playroom for children on rainy days. To trace the course of authority from Mr. Schuyler down through all of its ramifications to those persons who have no direct authority at all except over unemotional and inanimate objects such as scrubbing brushes, pails and mops would bewilder a geneologist. But a general idea may be obtained by consideration of the main subdivisions.

THESE WOULD PLEASE GOVERNOR SMITH MOST IF THEY PREPARED BOSTON SCROD

The building

In charge of the Hotel building and all its physical properties are the engineer, Mr. Broadfoot, and the superintendent, Mr. Carey. Between them they spend what it costs to keep the ground on which the building stands and keep the building lighted, heated, powered, repaired, renewed and redecorated. It is up to Mr. Broadfoot and his staff of 44 to see that power reaches all machinery and lighting fixtures, to see that no fuses long remain blown, no drains clogged. For three years, under his direction, plumbers have been replacing iron pipes with brass, stealthily moving from room to room lest they disturb a guest with their banging and clattering. In times of emergency he is commander-in-chief of the building. Should a fire break out his men would take charge of all elevators . . . it is up to him to see that the passenger elevators smoothly run their 10,000 vertical miles a year, that the freight elevators, which in their time have carried to the upstairs dining room such curiously unrelated matters as cream-puffs and live elephants, do not fail

COPYRIGHTED BY GABRIEL MOULIN

In line with San Francisco's Skyline...

THIS is an advertisement of a San Francisco printing organization that believes in the tremendous future of the Pacific Coast—a future for those now here and for those broad-visioned Eastern concerns who plan expansion Westward.

When you come to San Francisco, you will be impressed with many things, among them the excellent printing facilities this city offers.

When larger plants are mentioned, you will hear the name "Knight-Counihan". Folks will tell you of our reputation for fine color work, our creative facilities for the production of advertising and sales literature, that we are exclusive licensees for the Jean Berte color process, that we do advertising typography, lithographing, and are recognized by the San Francisco Stock Exchange for the manufacture of financial securities.

They will also tell you that Knight-Counihan serve many of the leading business establishments on the Pacific Coast.

We consider it a privilege to call these facts to your attention in a publication so symbolic of progress in the printing industry.

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A Profit is not without honor — *anywhere*

THE dividend check and the balance sheet are but symbols of success. The purpose of being in business is profit.

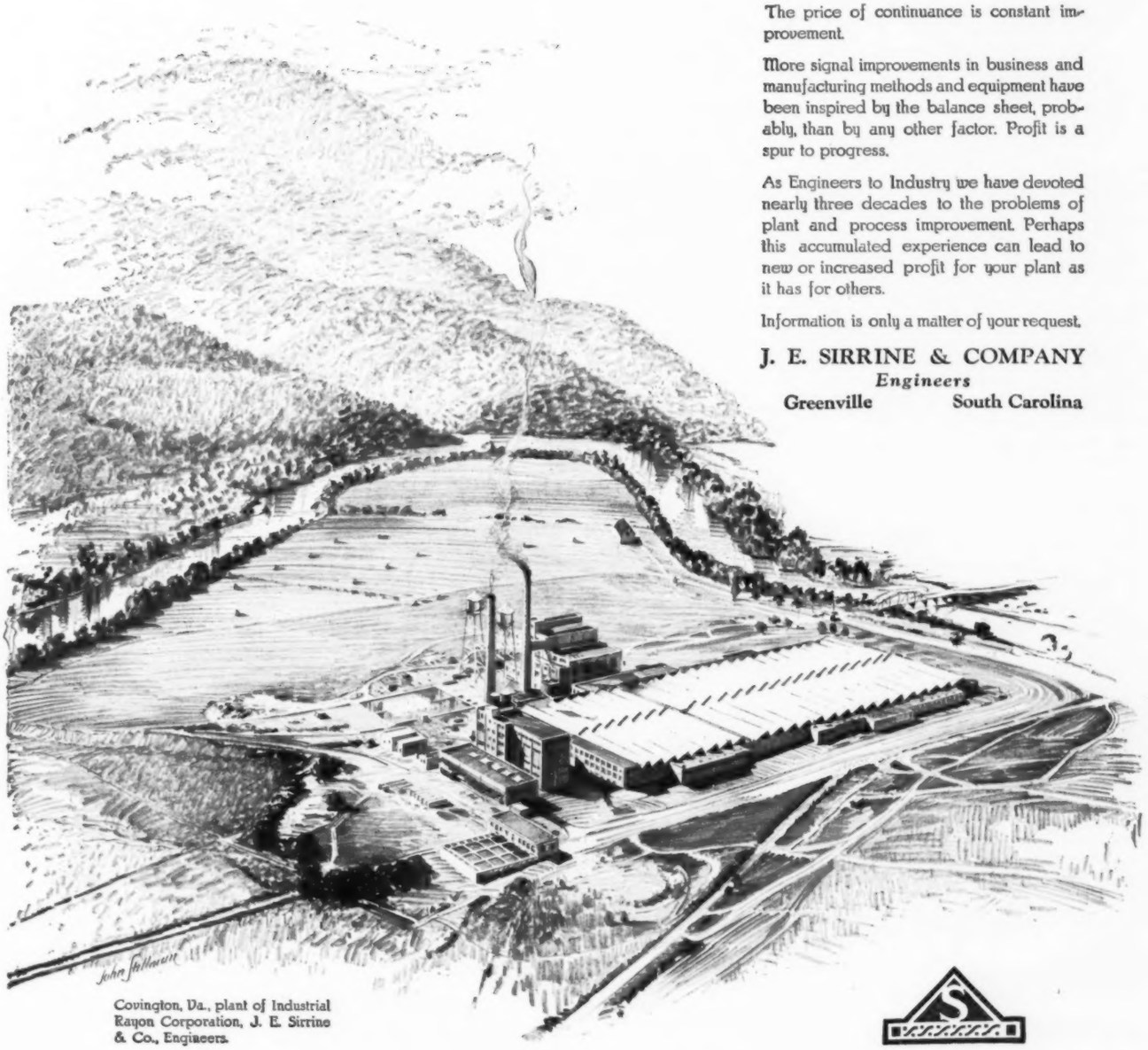
The price of continuance is constant improvement.

More signal improvements in business and manufacturing methods and equipment have been inspired by the balance sheet, probably, than by any other factor. Profit is a spur to progress.

As Engineers to Industry we have devoted nearly three decades to the problems of plant and process improvement. Perhaps this accumulated experience can lead to new or increased profit for your plant as it has for others.

Information is only a matter of your request.

J. E. SIRRINE & COMPANY
Engineers
Greenville **South Carolina**



Covington, Va., plant of Industrial Rayon Corporation, J. E. Sirrine & Co., Engineers.

ENGINEERING CONSULTANTS ON THE SOUTH

5th and LAST

IS there any logic that can keep more and more makers of furniture hardware and weavers of upholstery materials from locating here?

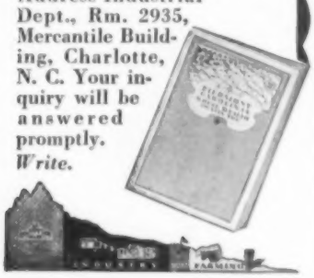
For the active Piedmont Carolinas' furniture industry, fifth in the Nation, is still importing the bulk of its upholstery fabrics, varnishes, and finishes, and *all* of its hardware.

Only three years ago there was *no* local source of supply for tapestries, velours, brocades and other fabrics used by the furniture industry.

Today, those factories that have been established here have made exceptional progress. There is still room for many more. They *do not have to hunt for a market.*

As to the making of hardware, the field is still completely open. Yet every factor that favors success exists right here.

Why not know? The facts are here for you in this book—"*Piedmont Carolinas.*" Address Industrial Dept., Rm. 2935, Mercantile Building, Charlotte, N. C. Your inquiry will be answered promptly. *Write.*



DUKE POWER COMPANY

SOUTHERN PUBLIC UTILITIES COMPANY AND OTHER ALLIED INTERESTS

to perform their 30 miles a day.

Mr. Broadfoot's work keeps him behind the scenes, up among the ventilators, or under the Turkish bath, next in the refrigeration room where tons of ice may be made in a single day. His main preoccupation is to see that his 21 stories and 12,400,000 cubic feet of building are in running order.

Mr. Carey collects the $295,000 the store and office lessees pay and finds room, wherever possible, for more of them. With his staff of carpenters and joiners he keeps the building in repair and, when necessary, orders new carpet for his two miles of corridors.

The housekeeper

One of the most important personages of the house personnel who is brought in intimate contact with the guest is Mrs. M. S. Dean, the housekeeper. It is her ambition to make every room different in furnishings and decorations.

Contrast Mrs. Dean, the housekeeper for half a million, with the housewife in the far west who has a family of four to care for. The housewife has her troubles, but what a picture Mrs. Dean would make in Madison Square Garden or Central Park in the midst of her half million; persons of all nationalities—princes and princesses, dowagers, maids and matrons, politicians, debutantes and brides, all talking different languages, and Mrs. Dean equal to the occasion. She has smoothed out the difficulties of centuries, those of the woman who would have no servants in her room, the lady who must have her linen and meals laid at her door; the lady who must have her linen lying on the radiator a week before she would use it; the man who couldn't sleep on a mattress that was not initialled as his own. Mrs. Dean has under her 117 chambermaids, bathmaids and cleaners.

Hers is the greatest contribution to the laundry where 35 labor to turn out an average of 30,000 pieces of hotel laundry a day in addition to 50 bundles of guest work. Last October the long rows of churning washers, roller presses, centrifugal dryers and squads of ironing boards turned out a daily average of 36,709 pieces of hotel wash. The week's wash of the Biltmore, hung out on a line, would make a tent the length of Manhattan island.

Kitchens

Prouder than the members of any department in the Biltmore are the kings of the cuisine; and they have world-wide reputations in their seats among the mighty. After all, it is the stomach that is satisfied which gives the greatest popularity to the hotel. Louis Seres, the Biltmore chef, has cooked for kings and queens and lesser lights of royalty, for statesmen, soldiers, and for the President of the United States. He was borrowed from the Biltmore by Secretary of the Navy Josephus Daniels to act as chef for the Peace Ship, George Washington, which bore President Wilson across the seas. When King Albert and Queen Elizabeth of Belgium wanted to visit the United States, Secretary Daniels again pressed him into royal service for the navy, feeling that the fodder of the battleship was not sufficiently unctuous for royal palates.

Mr. J. Malnati, maitre d'hotel and assistant manager of the Biltmore, has under him all restaurants, dining rooms, and is in charge of all banquets and social functions. He comes from an illustrious Italian family of culinary wizards, and wears the cross of the household of the King of Belgium. He went abroad with Seres, who is French, on both his trips and won his Belgian decoration in his service to King Albert and Queen Elizabeth. He is fluent in languages, highly educated and has traveled all over Europe. The culinary department of the Biltmore is under his jurisdiction, and he makes subways and ships and circuses out of the dining rooms on call. Malnati has conquered the problems which bobbed up with prohibition. He studies his men and women diners; he knows them.

He knows that former Governor Alfred E. Smith would rather have for himself Boston scrod and chocolate cake than anything else; that Sir Thomas Lipton lets his secretary do all his ordering when it comes to meals; that two broiled lobsters are to be sent with the seven truckloads that go to the United Hunts Meet at Belmont Park, for which the Biltmore has been caterer for years; because there are always two gentlemen who will want them.

Having decided what he will feed to his guest, Mr. Malnati orders it through his steward from Punderford Company, a supply firm which does the purchasing for many hotels, lending efficiency to economy, and satisfaction as well. On an

ON AN AVERAGE DAY THE BILTMORE BUYS 1,200 POUNDS OF FOWL, 60 PAIRS OF GAME BIRDS

BLAZING

a new financial trail

TODAY banking leaders of the Middle Northwest are blazing a new financial trail over a territory where only a few short years ago hardy pioneers were blazing more primitive trails. Covered wagons have given way to airplanes, group banking is taking the place of struggling individual banks, and inadequate financing has been changed into financial independence.

The Northwest Bancorporation, formed less than a year ago for the purpose of combining into one central organization the strong banks in key cities throughout the Middle Northwest, has proved its soundness and popularity. Its leadership in this modern banking trend has been established. Affiliated banks and trust companies have increased from 8 to 84, and total resources have mounted from $160,000,000 to $465,000,000.

As much a pioneer in modern banking as the covered wagon pioneers were in settling new country, the Northwest Bancorporation is blazing a new financial trail that leads to greater financial stability and independence for the Middle Northwest.

A GREAT BANKING INSTITUTION

NORTHWEST BANCORPORATION

COMBINED RESOURCES OVER $465,000,000

MINNEAPOLIS, MINNESOTA

Where *Values* Grow!

It is fitting that an announcement by BARRON'S, *The National Financial Weekly*, should appear in the first issue of a magazine that "deals with the factors which control the fortunes of every man."

¶ In a world that has become aware of the heroics and high excitements of business . . . Fortune will touch industry with the spirit of literature and art. BARRON'S will continue to deal with the grim realities of that same world. It will remain on the firing line . . . a reporter of that interplay of forces out of which values grow.

¶ Unless values grow, there cannot be leisure; without leisure there cannot be literature and art. As Will Durant puts it:

"Art can only be the flower that grows out of wealth. . . . The Medici came before Michelangelo."

Since wealth is the handmaid of art, the fitness of things demands that BARRON'S be present when Fortune enters to give distinction to the record of industrial life.

¶ Business and finance are no longer local. There is no splendid isolation for investors, no escape from foreign entanglements — every economic factor in every land enters directly or indirectly into the investor's calculations of values.

¶ That is why BARRON'S has eyes and ears wherever values grow. Its newsgathering equipment is world-wide, embracing the facilities of the Dow-Jones Electric Ticker Service, The Wall Street Journal, the Boston News Bureau, and the Philadelphia Financial Journal, the world's most important financial news organization.

¶ BARRON'S is more than a financial weekly. It is a financial service of exceptionally high quality; even more important than the practical help that it gives to investors, is the knowledge of investment principles and practice that comes from a week-by-week reading of its pages.

A specimen copy of BARRON'S *will be sent on request. To make the introduction to* BARRON'S *complete, there will be included with the specimen copy two booklets, "Ten Rules for Investors" and "How to Get the Most Out of Barron's," both of which have proved highly serviceable as aids in the accumulation of values.*

BARRON'S

The National Financial Weekly

44 Broad Street, New York City

C. W. BARRON, *Founder* — HUGH BANCROFT, *Publisher*

average day the steward might order, in part, as follows:

Meat	2,000 pounds
Butter	600 pounds
Fowls	1,200 pounds
Eggs	270 dozen
Milk	800 quarts
Game birds	60 pairs
Flour for bread	4 barrels
Oysters	7 barrels
Oranges and grapefruit	12 cases
Apples and pears	6 cases
Miscellaneous fruit	6 cases
Vegetables	20 barrels

Chef Seres receives this consignment with his menu from Mr. Malnati, after it has been inventoried, inspected and accepted by the steward. The latter has also to supply 3,000 meals a day for the employes of the Biltmore. The Seres kitchen takes up an entire floor of the Biltmore, and it is quite filled when the illustrious chef adorns himself with his flowing apron and his wonderful cook's hat. The four principal soups are his chief care; the rest are tasted by an assistant. Signs mark each section and tell each waiter what to expect in its domain. In one section half a dozen women shell peas and separate broccoli. In another little corner four men open clams and oysters. Overhead is the bakery where they are turning out, among other things, seven thousand rolls a day. Here are four soup vats, each holding 100 gallons. Upon the 23rd floor is Mike, the tinsmith, mending pots as he learned to mend them in Vilna, 25 years ago.

A public utility

The hotel in this age has grown into a public utility. In nearly everyone's life, at one time or another, it becomes his only available home, where bed and board, life's two prime necessities, may be obtained. Mr. E. J. Stevens, Vice President and General Manager of the La Salle Hotel, Chicago, gives the following description of his hostelry. "Among other necessary activities we operate a power plant and lighting plant of sufficient size to serve a city of 25,000 population; manufacture twenty tons of ice a day. We operate an extensive cooling and air-conditioning plant; manufacture carpets, draperies and furniture; operate a large carpenter shop for repairs and renewals of equipment. We have a comprehensive auditing, accounting and controlling system in charge of expert accountants; department of painting and interior decorating; a department devoted to buying, handling and caring for linens. We store and use cream, butter and various other foods, oil, coal and have a chemist who analyzes milk, etc. We have an ice-cream factory; a candy store; bread baking machinery; a mattress and pillow-making department; medical department and hospital; printing office; drug store; information bureau; cigar store; cabinet shop; police department; florist shop; a fully equipped tailor shop; a plant for lacquering, nickeling and refinishing bathroom fixtures and lighting fixtures; and a large garage and an automobile repair shop for the care of our guests' automobiles, along with all the other usual departments found in a hotel. There has just recently been completed on the roof of the hotel a powerful radio broadcasting station."

The investment in hotel properties throughout the United States and Canada was estimated by *Hotel Management* at $5,024,000,000 in 1928 and $6,000,000,000 in 1929. The Hotel Biltmore represents a value of $1,500,000 in equipment and fixtures, roughly $9,000,000 in land, $7,000,000 in building—a total of $17,500,000. Its present favorable return on investment is the result of slow growth out of deficits and represents far better than average results.

Beneath the profits of the Biltmore reaping its indirect share of the hotel business at its terminal is the New York Central Railroad, which owns the following list of hotel sites, in some cases having an interest in buildings as well:

Site	*Approximate Value of Site and Building*
The Biltmore	$16,000,000
The Commodore	20,000,000
The Roosevelt	13,000,000
The New Waldorf Astoria	40,000,000
The Chatham	2,250,000
The Park Lane	6,000,000
Yale Club	2,200,000
Marguery	4,700,000
The Barclay	7,000,000
Pierre's	6,500,000
Sherry's	6,850,000
Total	$124,500,000

The Central receives most of its share regardless of management. But nevertheless, the Central income from its hotel properties and the maintenance of the value of the national investment of $6,000,000,000 in hotels is dependent in the last analysis on successful management, reporting net profits on a large or small scale, after the manner of the Biltmore.

The dots on this map show the hundreds of places where we have done engineering or construction work. They are an indication of our wide knowledge of labor and material markets and long experience in building under the varying conditions obtaining in different sections of the United States and other parts of the world.

World-wide construction experience

....represented by a billion dollars worth of work

UNITED ENGINEERS & CONSTRUCTORS, INC

combining

The U. G. I. Contracting Co.
Public Service Production Co.
Dwight P. Robinson & Co., Inc.
Day & Zimmermann Engineering & Construction Co.
United Engineers & Constructors (Canada) Ltd.
Dwight P. Robinson & Company of Argentina, Inc.
Dwight P. Robinson & Company of Brazil, Inc.

Design and Construct

Industrial Plants
Steam Power Stations
Hydro-Electric Developments
Railroad Work
Gas Plants

Build

Apartments, Hotels
Office and Monumental Buildings.

THE example of President Hoover in pushing the immediate construction of great public works is being followed by manufacturers, railroads, public utilities and institutions everywhere.

New facilities—shops, factory extensions, railway terminals, power developments, electrification, foreign branch plants—are being immediately projected.

In connection with this national building program the services of this company are available to American industry.

Our experience is indicated by a billion dollars worth of work performed for 1200 clients located in practically every state in the Union, seven Canadian provinces and 12 foreign countries.

Through our offices strategically placed in five principal cities in this country, and through our three foreign companies, we are prepared to handle construction undertakings anywhere in the world.

UNITED ENGINEERS & CONSTRUCTORS

INCORPORATED

DWIGHT P. ROBINSON, PRESIDENT

PHILADELPHIA NEW YORK NEWARK CHICAGO
LOS ANGELES BUENOS AIRES RIO DE JANEIRO MONTREAL

MAXIMUM RETURN TO CLIENTS PER DOLLAR INVESTED

The Growth of American Business

1904-1929

is the title of a survey we have made of recent business history . . . It is brief and conclusive and points to the trend of general business in the future.

A copy will be sent you on request

HORNBLOWER & WEEKS

ESTABLISHED 1888

BOSTON NEW YORK CHICAGO CLEVELAND
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Members of the New York, Boston, Chicago, Cleveland, Pittsburgh and Detroit Stock Exchanges and the New York Curb Exchange

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Established 1899

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New York Stock Exchange
Chicago Stock Exchange
Cleveland Stock Exchange
Detroit Stock Exchange
Philadelphia Stock Exchange
Cincinnati Stock Exchange
New York Cotton Exchange
Chicago Board of Trade
New York Curb Exchange

NEW YORK CLEVELAND CHICAGO

Denver Detroit Boston Cincinnati
Kansas City Columbus Philadelphia Akron
Toledo Davenport Buffalo Massillon
Louisville Milwaukee Canton St. Louis
Colorado Springs Hartford

Chicago Budget

(*Continued from page 118*)

the host's dinner costs as much as that of one of his guests. That was an average of thirteen per month, which is not many. Thus our dinners cost us $312.

Some of the dinners precede a theatre, others a Subscription Ball. If we have four theatre parties a year with six persons in each, and tickets cost $4.40 each, we spend $105.60 on the theatre. Subscriptions to the Assemblies, the Bachelors, and Benedicts, and the Twelfth Night Ball come to $50.

Finally, under this general category of Good Will we allow $500 for liquor and tobacco. As I said, we have to practice economies, but less than $300 for liquor (domestic gin at $30 a case; Bourbon at $80) and $200 for tobacco are not among them. When my income is thus so nearly exhausted, I might well blush at this item, but *au contraire*, I like my environment, and admit that to this degree, I am subject to it. Perhaps this item will not appear on my son's budget when it comes his turn to earn and spend; but, as for me, I am not prepared to delete it.

If you will now refer finally to the chart you will discover that we have just $1,000 left.

Now comes the item of emergencies *or* luxuries. Definitely, they are alternatives, when both have to be covered by $1,000.

Anne and I naturally coöperate on the question of luxuries. If I want to go East to my college reunion, she gives up the Kentucky Derby. If she has her heart set on her trip to New York, I forego my duck hunt, which I took this fall. Both of us agree that the kids ought to be taken out of town during the summer. We can rent a house in Lake Forest for anything from $800, but this is a gilt-edged community, and it's just as pleasant to stay at one of the more distant resorts, where I can join them over the weekends.

Obviously, almost none of these things can be done on the $1000 which remains available. Practically what happens is that by June we must go right back to the beginning of the budget and draw upon that $2500 for savings which now looks gigantic. Then, why all this budgeting if savings—Article One of Faith—is to be renounced? The reason is that Anne and I have always provided for "savings" and it has been precisely by spending those savings that we have come to the end of each year happy—and solvent. And now, dear Father, with my $5000 raise in salary, we are really hoping that this year's savings will be quite permanently added to the capital account.

Markets

(*Continued from page 109*)

best known to Bonbright customers.

Landon Ketchum Thorne is a graduate of Yale's Sheffield Scientific School (Class of 1910). At Yale he was a Y.M.C.A. secretary, rowed on a freshman eight and a Varsity four, and was cousin of Brink Thorne, captain of Yale's 1896 eleven. After graduation he sold bonds, was, in 1916, head of Bonbright & Co.'s salesmen. Today he belongs to many clubs. Manhattan sporting columns have reported him as head of a syndicate of yachting enthusiasts who will build one of the four yachts that next summer will compete for the honor of defending the America's Cup against the challenge of Sir Thomas Lipton.

Alfred Lee Loomis is also a Yale graduate; is less typical in his private life. He is, for example, an expert performer of sleight-of-hand tricks. Most magical, however, is his Tuxedo Park laboratory, where, with electrical apparatus not dissimilar to that employed in a radio broadcasting station, he has produced sound waves which vibrate far too rapidly for the human ear's perception. These silent sounds will burn fingers and kill insects. They have also the faculty of breaking down blood vessels, will therefore produce fatal results when used on rats and other warm-blooded animals. Apart from his interest in supersonic "death rays," however, Mr. Loomis has followed a not unusual career. After graduation from Yale, he studied law at Harvard, then entered the firm of Winthrop and Stimson (now Winthrop, Stimson, Putnam & Roberts, with the second partner currently engaged as U. S. Secretary of State). In 1911 Miss Julia Loomis became Mrs. Landon Ketchum Thorne. In 1919 Mr. Loomis joined Bonbright & Co. and in 1920 participated with Mr. Thorne in the deal by which the Bonbrights vanished from Bonbright.

Not to be ignored in the Bonbright decor is the women's bond sales department, presided over by Mrs. Jacob A. Riis, widow of the philanthropist, pioneer in training women salesmen. Notably successful, she nonetheless cautions ambitious applicants: "A woman must be 10% better than a man to achieve the same results in selling."

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Anticipating every development; insuring ever higher standards of quality . . . Texaco Laboratories are the source of Texaco progress.

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Where the Iron Horse hauls the burdens of the nation, Texaco assists to an outstanding degree. More railroad car miles a year are lubricated by Texaco than by any other single oil company in the U. S. A. Ten billion miles is the remarkable record—a record which demonstrates again the enviable standing of Texaco in all branches of lubrication.

Where power is generated or used, in Industry or Transport, on land or sea or in the air, there you will find specialized Texaco Petroleum Products—renowned for their quality and chosen for their measurable economies in service.

And on the highways of this country, experienced motorists are daily showing their appreciation of Texaco quality by stopping for gasoline and motor oil under the Texaco Red Star with the Green T. Available everywhere. Sold in each of our 48 States.

THE TEXAS COMPANY

Refiners of a complete line of Texaco Petroleum Products including Gasoline, Motor Oil, Industrial Lubricants, Railroad and Marine Lubricants, Farm Lubricants, Road Asphalts and Asphalt Roofing.

TEXACO

TEXACO

The mark of quality for petroleum products

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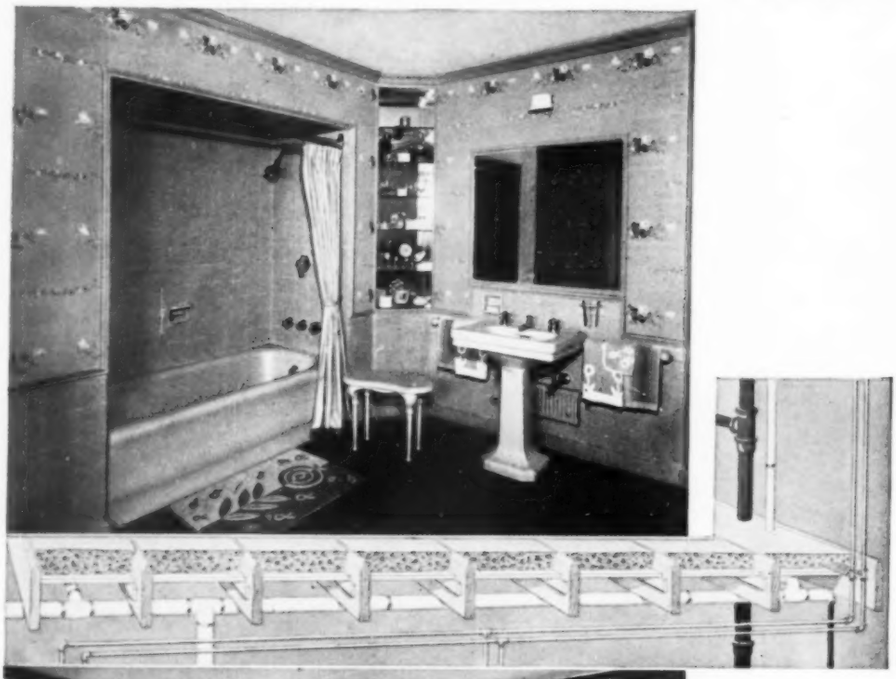
MODERNIZE YOUR COMFORTS ECONOMIZE YOUR CARES



The Modern Scheme of Living Calls for Color Schemes in Bathrooms

For decades the bathroom has been the least attractive room in the home . . . but today people realize that the bathroom should be as cheerful and colorful as any other room.

Rich, warm, genial "Standard" color schemes are transforming the modern bathroom into a work of art.

"Standard" Plumbing Fixtures will recreate the bathroom in your present home and bring undreamed of bathroom beauty to the home you plan to build.

Keep Down the Upkeep of Keeping Warm and Well

American Radiator heating guarantees you a maximum of comfort with a minimum of care. It cuts out the complications and cuts down the cost of antiquated methods of heating. It keeps down the upkeep of keeping warm and well.

Each part of an "American" Radiator Heating Plant—Boiler, Radiators, Accessories—is designed for perfect team work, just like the parts of an automobile. So—for reasons of Duty and Beauty—insist on "All-American" Radiator Heating.

"ALL-AMERICAN" HEATING FOR ALL AMERICA—"Ideal" Boiler; "American" Radiators and Accessories (Airid or In-Airid Air Valves, Arco Packless Valves) and for Hot Water Supply, the Hotcoil or Kalflash and Excelsa Water Heaters.

PRICE

AMERICAN RADIATOR EQUIPMENT

Completely installed for approximately $75 per room (steam system) east of the Rocky Mountains. Hot Water system slightly higher.

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AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

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SHOWROOMS IN ALL PRINCIPAL CITIES

A Little Down A Little Each Month

The Heating and Plumbing Finance Corporation, subsidiary of the American Radiator and Standard Sanitary Corporation, affords the best facilities for the purchase, by convenient payments, of the products of this organization.

Business that Endures!

Back in the minds of all leaders in business—deep down in their hearts—is the question: "How long will it last—will it endure?" And always the satisfying answer is the answer to another question: "How *well*, how *truly* does it serve?"—an answer that is moral rather than material—an appeal to pride in character rather than gain or profit.

Business that endures is labeled today by the Character of its leaders. It expresses itself materially through all its human conduct—its enlightened management, its modern practices, its law of order, and the justice of its control.

In the forming and voicing of the methods and means through which enduring business expresses itself, Modern Accountancy justifies the belief in the helpfulness of its service—an enduring service to business that endures.

ERNST & ERNST

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DAYTON	NEW ORLEANS	WACO
DENVER	NEW YORK	WASHINGTON
DETROIT	OMAHA	WHEELING
ERIE	PHILADELPHIA	WILMINGTON, DEL.
FORT WAYNE	PITTSBURGH	WINSTON-SALEM
FORT WORTH		YOUNGSTOWN

Banking—Group and Branch

(*Continued from page 140*)

factions, the greatest is safety. Ardent is our faith in the doctrine that if a bank is big enough it *cannot* fail. Into this doctrine we shall pry anon, for it is Article I of the Creed Branch Bankers. Here we need only record that it is a doctrine which the public easily espouses and hence size places a bank in a strong competitive position. The quality of a bank's assets is more important than their amount, but the public can scarcely judge the quality. And here we may conclude: there are good and sufficient reasons why banks should merge; in the last two years they most emphatically and speedily have. In New York City's long history before 1900 there were exactly 9 bank mergers. In the first quarter of this century there were 147. In the four years 1925-28 there were 55. In the first nine months of 1929 there were 30. So that, whereas in 1889 the 10 largest banks held one-third of the banking resources of the city, on Jan. 1, 1929, the ten largest held two-thirds. And on Sept. 1, 1929, they held 72%. In New Orleans, 3 banks have 85% of all deposits. And throughout the nation, 3% of all the banks have 64% of all the money. Of course this does not begin to be a monopoly, because 3% of all banks means some 700 separate banks. Or, whereas the biggest steel company accounts for 40% of all steel and Henry Ford for almost 50% of all autos, our present biggest bank holds less than 3% of all U.S. banking resources.

Coincident with this swelling of bank sizes, there has been a drift from the National System—banks which are under Federal Charter and supervision rather than State. Banks in the National System in October 1928 numbered 7,676 with resources of $29,025,480,000, in July 1929 had decreased 203 in number, $1,001,170,000 in resources. Since membership in the Federal Reserve is compulsory to National banks, voluntary to State ones, fewer national banks mean a theoretically weaker Federal Reserve system. But to date, the Federal Reserve System has not decreased in size, and, in the opinion of Governor Young, the bigger and more-branched banks become, the greater becomes the desirability of the Federal Reserve. Chief of the reasons behind the drift is confusion regarding National banks merging with trust companies as exemplified in the Worcester Case (on which is a note at the end of this review).

The Question; The Determinant

The question before us is: shall the Federal banking laws (and the State laws similarly prohibitive) be amended so as to permit Branch Banking, if not nation-wide at least throughout considerable areas similar to Federal Reserve districts? At the same time, shall the recent phenomena of Group Banking be given at least a acit approval? Or, on the contrary, shall steps be taken to prohibit or interfere with Group Banking except within such areas as Branch Banking may be permitted (which, if the areas should not be extended, would practically eliminate Group Banking)?

It is already clear why this question demands answer. Everywhere, in response to apparently sound economic forces, bigger and bigger banks have been formed which could be nuclei of branch systems even though many have now no desire to be.

Everywhere separate banks at a distance from each other are uniting in groups and logic would seem to indicate that in most cases the group is only halfway-house to Bank with Branches. And, in California, most prosperous of states, we have a potent functioning example of branch banking which challenges comparisons throughout the U.S. Added to all of which we note in the eye of this and that banker the glint which says, "Having satisfied the urge to merge, now I crave to branch."

The question to be decided is a public question. The determinant is, therefore, the public weal. If each and every one of the 1,000 biggest banks craved to branch (many sincerely disclaim such a desire) and if they would all make money by so doing—that, in itself, would be no argument. We ask only: is it for the public weal? And only to the extent that greater bank profits make for better banks for you and me is the bigger-profit argument admissible.

With respect to the production and distribution of automobiles, we assume that Messrs. Ford, Sloan, Chrysler, Nash, *et al.*, best serve the public when best they serve themselves. That, it appears, we do not assume in the case of bankers. With respect to the distri-

Good night

It was early evening. A long night stretched still and far 'til morning. A bitter winter wind shrilled and whistled and stung. His rumpled and warm bed beckoned . . . and he hurried and he smiled and he called his floor and he locked his door and he sung and sang and made his room look like home and he piled his clothes in disarray and he sank with a grin into great and comforting billows of warm and woolly blankets to rest and *read.* And *he slept* . . . and in his dreams . . . he sauntered again into the offices of the men who could purchase the things he came to Detroit to sell and *he sold* all night long. And in the morning . . . rested, hungry, fit and fine, he cracks an exultant towel at another sunny day. See you soon. *Good night.*

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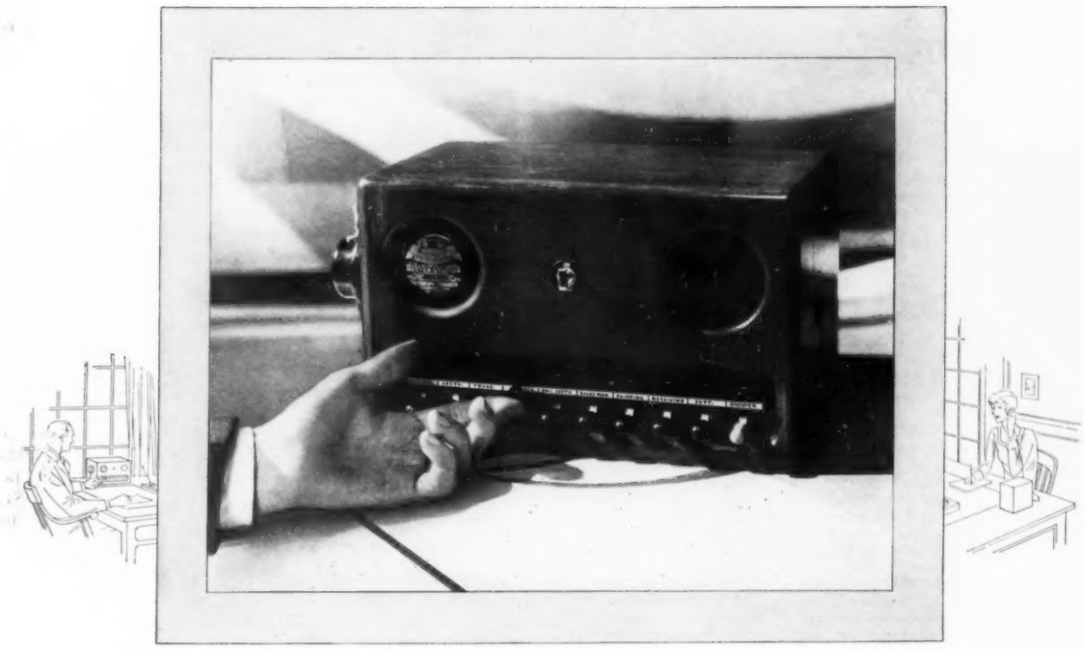
bution of food and a thousand and one other things we let Woolworth, Kresge, A. & P., Montgomery Ward, *et al.*, go as far as they like—on the assumption that only that which pays us pays them. But bankers—no! What a bank makes is not, for us, adequate evidence of its merits. And the bankers are the first to applaud our inquisitorial attitude. For a banker knows what his customer rarely considers, that he is not a businessman in the ordinary sense. He deals in no commodity. Only incidentally does he deal in the money in his vault. He deals almost entirely in professional opinion—for credit arises from opinion. He gives, as Mr. George W. Davison says, a buying power to the credit of his customers based on his *judgment* of their character and resources. Certainly the banker cannot create credit as Keller could pull rabbits out of a hat. Certainly credit is limited by a bank's reserves—and in that is a sort of commodity. A bank's "profits" differ radically from a lawyer's or doctor's fees; they also differ from the price obtained by merchant or manufacturer. Thus it is that between banks, while the competition in rates of loans and foreign exchange causes bankers to vie over 1/8c and 1/64c, the chief competition is in service and prestige. The banker, in short, is at least a semi-professional and must therefore be surrounded by the safeguards necessary to keep professions pure. Just as states license doctors, so they supervise bankers, and if the state seems more concerned with bankers than with doctors that is only a commentary on the relative importance which people place upon their money and their lives.

The Debate

Ordinarily the burden of proof is upon those who advocate a change. But Branch Bankers are able to state that in the last decade, a decade of amazing prosperity, 5,000 banks failed (*circa* one in every five banks in the U.S.), tying up deposits of $1,500,000,000. If we added to the 5,000 banks that have actually failed in the U.S. in the last decade, the number that have been "taken over" on eve of failure, our statistic would be even more appalling as to jeopardized deposits and capital lost. Even now, the big Groups are finding that some of the little banks they investigate with a view to acquiring are in an extremely frigid, if not frozen condition. Most of the failures occurred in regions which were not prosperous; but all occurred within the confines of the sovereign United States which reeked with prosperity. In the great Bull year of 1929 there failed, before the stock market crash, 63 Federal Reserve member and 408 non-member banks. This, of course, raises a presumption of doubt against the present system, and we shall, therefore, first review what the opponents of change can say in favor of the present system.

First of all, they meet this damaging evidence of bank failures by admitting that evils exist. Many banks, they say, have been established at crossroads where authorities should never have permitted a bank to be. Similarly many banks start business with inadequate capital. Possibly no bank should be born with less than $100,000, whereas many states permit birth on such ridiculous capital as $25,000 or even $10,000. Six percent per annum on $25,000 is $1,500—and since that trifle is likely represent the bank's profit it is obvious that the salaries paid to the necessary staff to produce the profit are apt to be microscopic. Of course many country bankers take a salary as well as profit from the bank and also make something on the side. Nevertheless, there are undoubtedly too many small banks, and as communications develop constantly fewer are necessary: therefore, let the uneconomic bank transfer, as soon as possible, all its assets to the nearest good bank; let no more shoestring banks be started, and when a bad situation is thus rectified let us join with Mr. Davison in saying that all the damage to date is "a trifling price to pay for the values inherent in and benefits derived from our individualistic banking". So say the opponents of basic change, and it should probably be agreed that they partially meet the most alarming indictment of the present system. For this, really, is quite as much an indictment of how the system has been managed as of the system itself. When Louis XVI ascended France's throne, autocracy was probably doomed, being unsuited to the inevitable future; but in France autocracy fell before an attack upon its management rather than because of its essential inadequacy. Where autocratic management was good, as years later in Germany, it survived until it made one big mistake. So, if we ask banking authorities to be more intelligent and strict and if we extend the principles of Clearing House supervision, we can justly envision a continuance of the present system without its recent disgraceful record of bank



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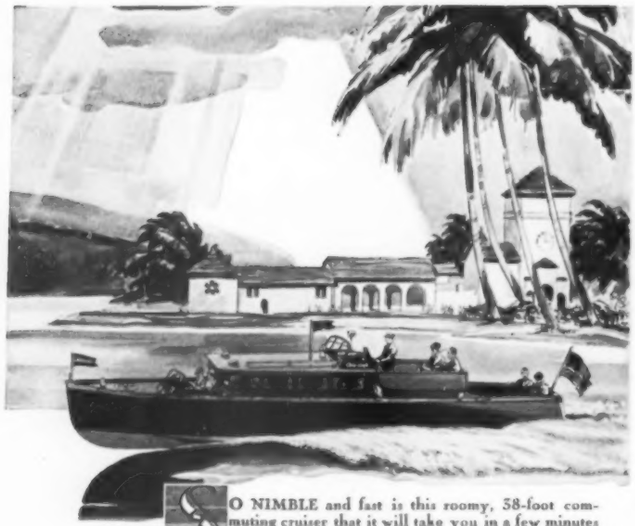

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failures in the United States.

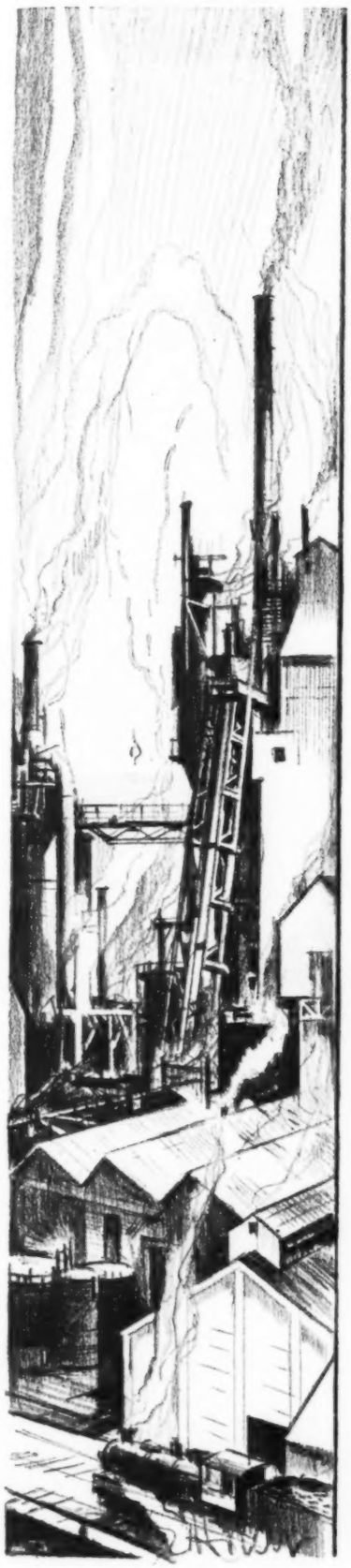
To these arguments, the Branch Banker answers that elimination of these small banks would close three out of every four banks in the U.S. and deprive thousands of communities of banking service. To remedy the situation he points out that a Branch Office is perhaps a better nomenclature than a Branch Bank, that whereas a community cannot support even the tiniest of banks, it can well support an office whose function is only to pay and receive, ordering other services from the home office only as needed. For examples of what little business is required to keep an "office" profitable, the Branch Banker can point to England where small towns have branch offices that are open two, perhaps three days a week.

Aside from inadequate capitalization, the chief causes of bank failures have been local economic catastrophes such as the Fruit Fly in Florida. Concerning this, Anti-branch-bankers say two things: 1) No banking system can prevent flies; 2) Assuming that the banking (i.e. extension of credit) prior to the catastrophe has been good banking, the losses will be just as great under one system as another. But here, of course, the Anti-branch-banking position is weak. The damage done by the fly to crops is one thing; but it is another and worse thing if the fly not only ruins oranges but closes banks. With equal losses, an independent Florida bank might have to close, where the Florida branch of a large Atlanta or New York bank would not have to close. An actual case in point was the failure of unit banks in Macon, Ga., while the branch of the Citizens & Southern not only kept open but gained materially. Right here is where Branch Banking is most likely to win the debate insofar as what might be called "tangible arguments" are concerned.

We have previously said that Anti-branch-bankers had successfully met the serious indictment that the present system permits too many bank failures. Now we shall have to revise that statement. We shall have to say that they have quashed the indictment so far as a large percentage of failures is concerned—they have taken the alarm out of that dreadful statistic: "5,000 failures". But they have not proved that their system is the best possible system for *real emergencies*. All the banks in Florida might have been capitalized at over $100,000; all might have been as well managed and supervised as is reasonable to expect, but still some of them would almost certainly have failed in 1929. On the contrary, it is by no means certain that there would have been any failures if, to take an extreme example, all banks in Florida had been branches of some 20 large institutions. No areas in the world have suffered more economically than some British coal mining districts, and during the decade in which the U. S. had 5,000 failures, England had not one single one. While 5,000 banks were failing in the U. S., only 28 in California had to close.

Thus, even if Branch Banking cannot lessen one set of losses (and perhaps it can) it can certainly lessen a secondary and sometimes bigger set of losses arising from such general breakdown as occurs when banks close doors. Thus we can say that Branch Banking has tentatively established its case *by showing its theoretical superiority as a system for meeting emergencies*, which is certainly a fair test for any system.

Having done so, we shall proceed to knock the theory into a complete state of dejection by stating that huge Branch Banking systems have, as a matter of fact, failed and failed with an economic thunderclap. In 1922, Italy and the sophisticated world was scandalized by the collapse of the Banca Italiana di Sconto which had 190 branches throughout the Kingdom and a prestige even greater than that of its chief, Angelo di Pogliani. If Italy was rotten, then consider that in 1893 (year of the end of the credit inflation) no less than 13 Branch Banking systems failed with $500,000,000 of deposits in that brisk rising continent of Australia. If Australia was raw then consider that in South Africa where white civilization is old, and which was a sort of godmother to the whole Branch Banking idea, it was only the government which in 1865 prevented a collapse of just about the whole financial structure. If South Africa is too distant, we come to Canada. Reluctant as they are to preach a sad lesson with so friendly a neighbor as their text, the Anti-branch-bankers find in Canada their most vivid argument. As we shall see below, they partially and perhaps inaccurately attribute Canada's relative backwardness to the fact that it has had to grow up under the Branch Banking system instead of under our virile local unit system. But, more than that, they are able to report that in 1923 the Home Bank of Canada with 78 branches failed and that in 1922 the Merchants Bank of Canada with 400 branches was only saved by painful absorption into another



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bank. So, of course, it is absurd to believe, as one might believe after a session with a particularly rhetorical Branch Banker, that if a bank is big enough it *cannot* fail. Nevertheless, in spite of all this, we must still subscribe to the theory that a Branch Banking system offers the greatest safeguards against regional financial catastrophe. And, theory aside, the huger the bank the nearer its safety can approximate the safety of the country in which it exists. (Fortunately, this review does not have to consider a world Branch Banking system.) Practically, this means that the greatest resources of the country are apt to be rushed to the aid of a bank if it is huge enough —as, for example, in the case of the Merchants Bank of Canada, in which no depositor lost money, so that its case is scarcely an argument against Branch Banking.

Here it must be repeated that there is no present question of nation-wide Branch Banking in the U. S. Some Branch Bankers may dream of it, and Mr. Giannini may demand it, but all they expect soon is regional Branch Banking—so that a bank may, for example, have branches throughout some such wide area as the Federal Reserve District in which it is located. And of course all bankers naturally detest revolution (except possibly in Central America) so that all agree that whereas a revolution is now occurring there must be nothing revolutionary about the revolution. What is going on in various forms is concentration of financial control. Quite aside from the manner of concentration there is something very grave to be considered: while concentration in many cases takes the sting out of liquidation, sometimes it festers without removing the sting so that a nation, to change our medical terms, gets pneumonia instead of just having a good sneeze. The classic example is Japan. To quote that learned economist, Mr. Benjamin M. Anderson Jr. of the Chase Bank:

> In the crisis of 1920-21, our many thousands of independent banks, by cooperative effort and by resort to the aid of the Federal Reserve Banks, were able to prevent the crisis from degenerating into a panic, and were able to go through the liquidation in an orderly manner . . .
>
> The business tide turned in the third quarter of 1921, and the year 1922 was a year of strong recovery. In Japan, on the other hand, concerted action by a few great banks, a few great industries, and the Japanese government, choked off the crisis and the liquidation early in 1920, and the stale position, unliquidated, was carried over, despite a partial liquidation at the time of the earthquake in 1923, until the great crisis in 1927, when some great banks went under. Japan endured seven years of business stagnation in the vain effort to avert losses which our system of banking compelled us to take in 1920 and 1921. And Japan is not the only country where banking concentration has unduly delayed necessary liquidation. When many thousands of independent banks must independently meet their obligations at the Clearing House every day, it is impossible to carry economic mistakes anything like so far as is possible when only a few great banks dominate the picture.

Incidentally, Mr. Anderson does not reveal his net opinion on the subject, merely urging caution in a development which he recognizes as valid in many instances.

Because of that Florida argument, the Branch Bankers still have the best of the debate. As indicated, they can surmount the difficulties raised by examples of Canadian and other failures, and they can assure us that we can have Branch Banking without any such concentrated domination as in Japan or some European countries.

But the great and profoundly appealing argument of the Anti-branch-bankers is yet to come—the argument of Individualism vs. Regimentation. However, before we get to that we must briefly recite some points, which, though minor, are extremely pertinent to the whole situation.

We have first to note that banking has become extremely complex and has long since exceeded the old boundaries of regular banking. The General Motors Acceptance Corp. which finances your purchase of Cadillac or Chevrolet, is doing a banking business—doing it in all 48 states of the Union. The aforementioned Chase National, no loud proponent of branch banking, owns the American Express Co., which, as everyone knows, no longer carries trunks on its back, but does issue travelers' checks and will soon open its own trust company. Though you should buy such a check in Oskaloosa, it is Mr. Wiggin at 18 Pine Street, New York, who is promptly in command of your

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money. Building and loan societies, the ubiquitous Morris Plan Banks, and such multi-branched investment bankers as Lee Higginson & Co. with its 37 offices and Brown Brothers, are all interstate banks. Even the mail order companies, through financing by deferred payments, may be classed as doing a banking business that is not halted by state boundaries. Dozens of other instances of what are practical forms of nation-wide banking could be cited—the only regulation against interstate banking is in the case of those corporations which are unfortunately chartered for the purpose of doing a banking business.

All of this comes most directly into the argument under the heading of Service which has already been mentioned in connection with bank mergers. But many a bank which merged momentously in order to serve its City with branches sees no reason for extending the process into small city or country branches. The argument is that all that can be done by wide-area Branch Banking can be done by correspondent banking. Not only can the county bank refer its client to its big city correspondent for such services as it cannot render itself, but it can actually render these services through its correspondents. To take a minute example, tickets to Timbuctoo or a prize fight: the theory is that the big city bank is so anxious to please the President of Hillbilly Savings Bank that it will get tickets for the President's friends with just as much as, if not more, alacrity than for the customer of its own Hillbilly branch. And if this is not the case, then let it be the case. Big Anti-branch-bankers are saying to their little correspondents: Ask and ye shall receive. They are encouraging little banks to increase their prestige by printing on their letterheads the great name of their big correspondent. Mr. Davison even toys with the peculiar suggestion that there should be committees of independent bankers all corresponding with the same metropolitan bank which would act as "clearing house for ideas". And of course the right hand of advice in making loans or establishing trust departments is freely offered.

Tut, tut, says the Branch Banker, do not evade the issue by creating a Mr. Tweedledum in the image of Mr. Tweedledee. The simple fact is that times have changed. It is no longer enough that the smalltown man should have friends in the big city: the whole great big city with its globe-girdling relations must come to the small town—must come in banking, as it has come in movies, style, news, tempo, power.

The Branch Bankers go further. Confident that the tide of events is justifying their thesis, they assert that Anti-branch-bankers do not speak with real conviction based on a study of the facts. The entire Anti-branch-bank argument, they say, is simply an attempt to rationalize the *status quo*. Bankers who have succeeded under the present rules are, for personal reasons, loath to encounter the hazards of change. Evolution may be the law of life, but it is characteristic of human beings to resist it—therefore evolution occurs only under stress and strain and usually with pain. Meanwhile, big bankers who oppose this evolution are accused of an insincere effort to curry favor with the little independents.

However, this merciless undermining of the Anti-branch-bank position is calculated to enrage many an Anti-branch-banker. For the Antis believe that they are fighting for a great cause—Individualism. Speakers at last year's American Bankers Association meeting rose to heights of eloquence, with honors to Vice President Max Nahm of Bowling Green. Ky., whose peroration was:

> In the smaller towns, the scheme of life is not complete without the local unit banker; men like Callie Harris in the town of Franklin, Kentucky. Benign-faced, with a smile for everyone, an optimist in all emergencies, family and business, adviser to every patron or friend, trustee of every church or hospital loan, executor when men died—dedicating their souls to God, and their estates to the banker. He befriended a poor foreign peddler with his pack on his back, nursed him from death's door back to health. This peddler became a great and successful merchant and when he died, his will gratefully gave his large estate to this banker. When Mr. Harris was buried, nearly every man, woman and child in his county came to drop a flower on his red clay grave. Replace such a man by a city clerk awaiting every morning a circular letter, or his master's voice out of a loud speaker's horn? God forbid.

It is on this Rock of Individualism that Anti-branch-bankers ultimately take their stand defying all comers. It is a noble position and

[*Continued on page 178*]

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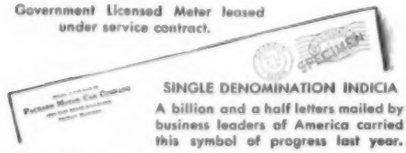


SINGLE DENOMINATION INDICIA

A billion and a half letters mailed by business leaders of America carried this symbol of progress last year.

METERED MAIL

the method that made stamps obsolete

TRADE METERED MAIL MARK

The POSTAGE METER COMPANY — *Main Office* **911 PACIFIC ST. STAMFORD, CONN**

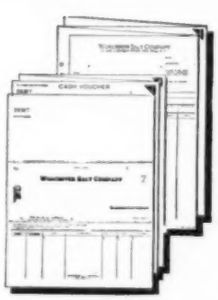
PITNEY-BOWES MAILING EQUIPMENT — *Offices in* **TWENTY FIVE CITIES**

3088

Larger record-writing volume with less personnel

Mani-Folding in office of Worcester Salt Co.

MANI-FOLD



Billing and Cash Voucher Records are both handled by the Mani-Fold Method at Worcester Salt Company. Read details opposite.

Worcester Salt Company, New York, N. Y., pioneer table salt producers, report a saving of 50% of the detail in their billing department and at the same time an increase of 60% in productive capacity, through the adoption of the Mani-Fold Method of Continuous Forms.

Thomas F. Curran, Comptroller, made an exhaustive study of various record-writing methods before standardizing on Mani-Fold. Not having to change their already installed systems to use Mani-Fold forms played a part in the decision.

This well known concern uses the Mani-Fold Method not only in the billing department but in their cash voucher record and check-writing system (the checks being on Hammermill Safety Paper, the forms on Hammermill Bond).

Other executives are invited to take advantage of the research efforts of Mr. Curran, and upon request will be supplied a portfolio of proof and samples.

THIS METHOD DOES NOT REQUIRE THE INSTALLATION OF ANY NEW SYSTEM OF ACCOUNTING OR OTHER OPERATIONS.

The change is merely from padded or loose single sheet forms to a continuous strip of attractively offset printed special Mani-Fold forms.

Hand the coupon to your secretary to write for full details and tabulation of the Six Superiorities of this Method.

MANI-FOLD*
13310-4 Coit Road, Cleveland, Ohio.

Send Executives' Portfolio of Proof, Samples and Six Superiorities of the Mani-Fold Method of Continuous Forms for Record Writing.

Name _____

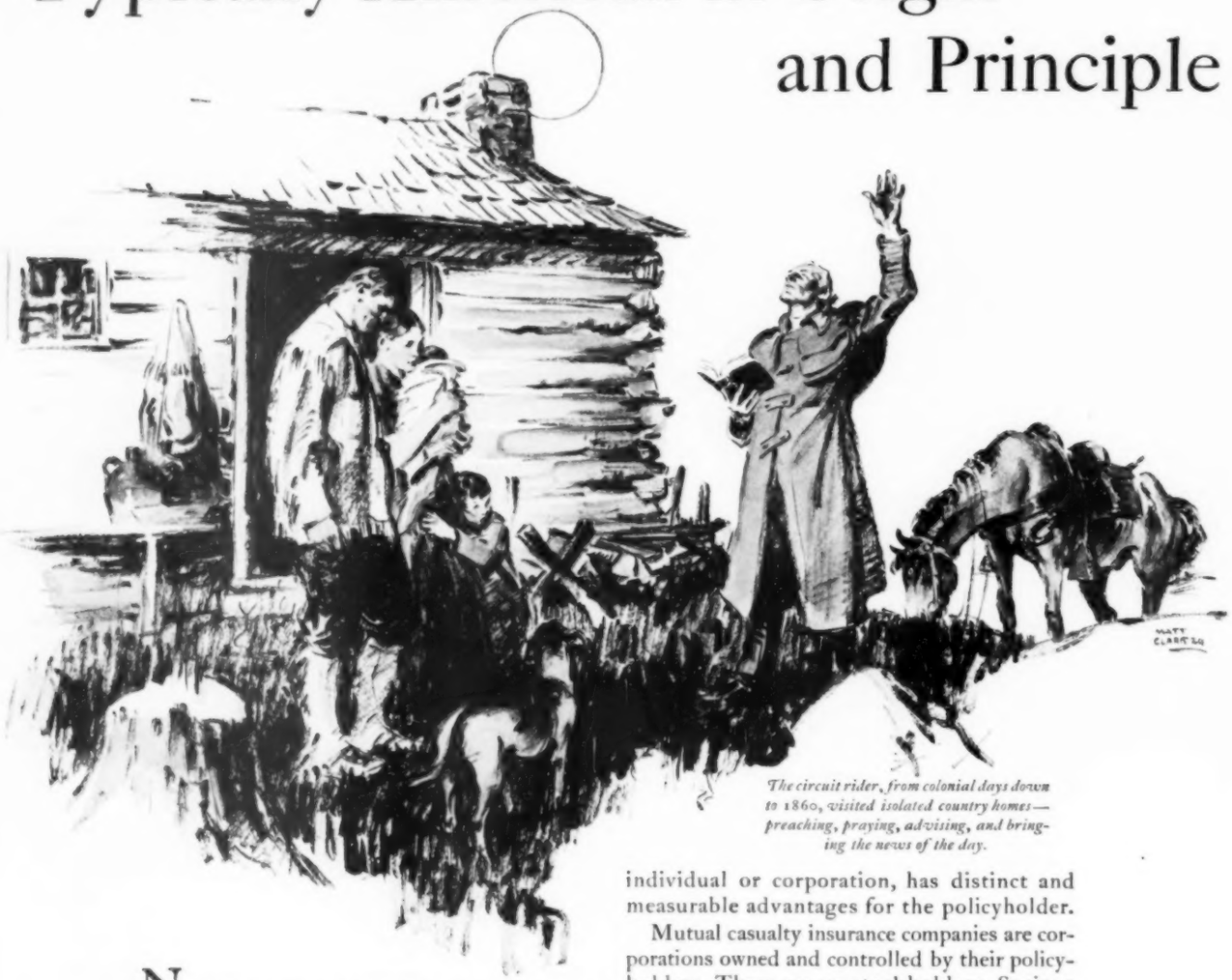
Address _____

(Or use letterhead)

*Division United Autographic Register Co.

XUM

Typically American in Origin and Principle



The circuit rider, from colonial days down to 1860, visited isolated country homes—preaching, praying, advising, and bringing the news of the day.

NO institution or business is more essentially and typically American than mutual insurance.

Founded twenty-five years before the signing of the Declaration of Independence—mutual insurance has grown with the country—shared in and contributed to its greatness.

The basic principles of mutual insurance reflect the spirit of colonial America. Born at a time when honesty, sincerity and helpfulness between men was essential almost to existence itself—mutual insurance has adhered to these fundamentals for over 177 years.

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Mutual casualty insurance companies are corporations owned and controlled by their policyholders. There are no stockholders. Savings effected by careful management are returned annually to policyholders.

An interesting and worth-while booklet on mutual casualty insurance will be sent on request. No solicitation will follow. Address Mutual Casualty Insurance, Room 2205, 180 North Michigan Avenue, Chicago, Illinois.

MUTUAL PROTECTION IS AVAILABLE FOR THESE CASUALTY RISKS:

Accident and Health	*Liability (all forms)*
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Burglary and Theft	*Property Damage*
Workmen's Compensation	*Fidelity*

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Allied Mutuals Liability Insurance Co., *New York City;* American Mutual Liability Insurance Co., *Boston, Mass.;* Builders Mutual Casualty Co., *Madison, Wis.;* Central Mutual Casualty Co., *Kansas City, Mo.;* Employers Mutual Casualty Co., *Des Moines, Ia.;* Employers Mutual Liability Insurance Co., *Wausau, Wis.;* Exchange Mutual Indemnity Insurance Co., *Buffalo, N. Y.;* Federal Mutual Liability Insurance Co., *Boston, Mass.;* Hardware Mutual Casualty Co., *Stevens Point, Wis.;* Interboro Mutual Indemnity Insurance Co., *New York City;* Jamestown Mutual Insurance Co., *Jamestown, N. Y.;* Liberty Mutual Insurance Co., *Boston, Mass.;* Lumbermens Mutual Casualty Co., *Chicago, Ill.;* (American) Lumbermens Mutual Casualty Co. of Illinois, *New York City;* Merchants Mutual Casualty Co., *Buffalo, N. Y.;* Michigan Mutual Liability Co., *Detroit, Mich.;* Mutual Casualty Insurance Co., *New York City;* Texas Employers Insurance Association, *Dallas, Texas;* U. S. Mutual Liability Insurance Co., *Quincy, Mass.;* Utica Mutual Insurance Co., *Utica, N. Y.*

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Follow the dictates of good judgment and consult with us that your name may be added to this ever-increasing "roll-call" of representative American Industries.

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Houston Compress Co.
Stewart Sand Co. of Kansas City
Anderson-Clayton Co. of Houston
Mapes & Ferdon, Ltd.
Nicholson Terminal & Dock Co.
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Imperial Tobacco Co.
Humble Oil Co.
Wisconsin Steel Co.
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Consulting Engineers
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Sod in six weeks! A rich, velvety stretch of lawn that chokes out weeds before they can grow! A deep, thick, uniform turf that makes your estate a beauty spot! That's what you'll get if you plant Scott's Creeping Bent.

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Creeping Bent—long recognized as the ideal grass for golf putting greens—is now producing Super Lawns. Instead of sowing seed, you plant stolons or the chopped grass—and in a few weeks you have a luxuriant lawn like the deep green pile of a Turkish carpet. With proper care no re-seeding is ever necessary.

We will gladly give you any further information you may want about "Scott's Creeping Bent."

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one which we will examine in the following separate section, which will also serve as our conclusion.

The Conclusion

American civilization, these last busy years, might be expressed in terms of barriers, their demolition. Not only space-barriers and time-barriers but price-barriers (a car for every price) and culture-barriers (in our colleges 920,000 students). If everybody is to have everything then everything must be much of a muchness—a corollary which sensitive people resent.

Hunger, cold, exile, blood,—such is the traditional price of revolution. Noting with profound satisfaction that we have made our revolution without any payment in such sacrificial coin, we inquire, somewhat nervously, what have we paid, and we say we have sacrificed the individual to the mass.

Actually we have scarcely felt the pinch. Actually I, John Individual, have expressed my ego, and possibly expanded it, to a degree my grandfather could not have believed possible. And this not *in spite of* but apparently *because of* the fact that, with a few relatively unimportant restrictions, we have let Industry & Commerce consolidate and expand as much as it pleases. Where could our objection lie? Will we indict Woolworth for opening in our town a store exactly like those which have so well pleased 1,248 other towns? Can we object to the *Saturday Evening Post* vending the same story to 3,000,000 people if 3,000,000 people desire it? If one company makes 40% of our steel what is our complaint, if we have not an idea how to produce steel cheaper or better?

In short, we present the curious spectacle of a nation rapidly changing which has never debated the change. (We did, of course, debate it under Theodore Roosevelt before we understood the question. And certain odd fellows have since done some debating before tiny audiences.) Now, nothing Alice saw in Wonderland could be stranger—is it the bankers who will cause us to debate, for the first time, the desirability of our civilization? Is branch banking destined to define the issue between Machine and Man? Will the Individualist rise upon stump or pulpit and proclaim that Consolidation may have our steel, our amusements, even our food but shall not desecrate the bank? And, having saved the bank for Individualism, will the tide turn until again everyman under his own vine shall churn his individual butter from his individual cow?

Whether a national debate on Individualism will be precipitated by the trend toward consolidation of banking resources, we cannot say. It is possible. But it would seem that it is too late appreciably to check the trend. Too much happened in 1929. The trend naturally slackened pace after October but all evidence points to more bank mergers, more formations of Groups, ultimate extension of branch banking even into nation-wide propositions. There is no widespread desire for this development. Neither was there agitation in favor of concentration in Industry. Concentration simply came in Industry; it comes in Banking. It comes for reasons so varied and complex that they cannot be categorized. A bank corporation may be started for reasons of private gain. Another may be started to compete with the first. One banker may sell his bank to a Group because he has no sons or a low opinion of his sons' ability. Two big banks may merge to avoid separate absorption into a Group and the merged bank may itself start a Group under the momentum. Personalities, competition, facts, fear, profit, fashion—the whys are obscure, the result is patent.

It seems clear, moreover, that the development is entirely consonant with the kind of civilization we are erecting. In saying this we need not descend to the childish mistake of arguing from analogy. We need not say that just as railroads, stores, churches, motors, amusements, lawyers have consolidated, so also must banks. But we must say that the consolidation in nearly everything else radically changes the kind of civilization which banking must serve. Thus: 1) the very fact of consolidation elsewhere creates a new banking question; 2) the factors causing consolidation elsewhere *may* apply with equal force to banking.

We are forced to the conclusion that the factors causing consolidation in all else *do* apply to banking with sufficient force to make further consolidation (and branching) not only inevitable, but, in the circumstances, wise. Nothing but an almost inconceivable law can break up the present Groups or prevent formation of more Groups. The Group idea serves as a worthy intermediate expedient. But it can scarcely be regarded as an ultimate pattern. If both the Northwest Bancorporation and the First Bank Stock Corporation were legally permitted to put all their several banks in one big bank, one or the other would do so in short order for

THE NEXT STEP IN PUBLIC UTILITY SERVICE

DURING the last few years, America has watched with amazement the gigantic development of public utilities. The generation and transmission of electricity has been multiplied to the great benefit of industry and with an ever-increasing contribution to the efficiency, comfort, convenience and happiness of modern life.

The centralization of electric generation, with its resulting economies and advantages to the public, is comparable to all utility services. We have seen central pumping stations and underground water mains supplant hundreds of thousands of individual pumps and wells; central electric stations have rendered obsolete the kerosene lamp and other individual systems for producing power and illumination; modern sewerage systems contribute to health and sanitation, and transportation utilities girdle the continent with speed and comfort.

In practically every city and town, smoking chimneys provide condemning evidence to the inefficiency of our common heating practices. Thousands of tons of soot are distributed over our communities, soiling our beautiful buildings, ruining our merchandise and seriously affecting our health. Monstrous coal and ash trucks add to our traffic congestion and thousands of individual fires set up a terrifying fire hazard. A great need exists for public heating.

In scores of American cities, the magic hand of Public Utility Service is demonstrating that these conditions can be vastly improved by District Heating. Generating steam in efficient central boiler Plants and distributing it through well insulated underground mains to all of the buildings within a given district is the solution public utilities are offering to the age-old heating problem. Public heating plants are growing rapidly in response to public demand for service.

Not only for heating purposes, but for process work in industrial plants, enormous quantities of steam are required. Public utility executives, constantly on the lookout for opportunities to render profitable public service, are realizing that District Heating for business, residential and industrial sections is a field of utility service where the surface has only been scratched. Here may be discovered manifold opportunities for economies, increased incomes and magnified public benefit.

With the widespread financial support the American public is giving to public utility enterprises, we may reasonably look for the same rapid expansion in public steam service as we have observed in other fields of service requirements.

For more than fifty years the activities of the American District Steam Company have been closely allied with the development of District Heating. The experience gained through this close association is available to utility executives and others interested.

AMERICAN DISTRICT STEAM COMPANY

GENERAL OFFICES AND WORKS

NORTH TONAWANDA, N.Y.

ADSCO

A
Personal Invitation
to
Hotel Hollenden

I TAKE pleasure in extending to the readers of "Fortune" a most cordial personal invitation to make The Hotel Hollenden their home when in Cleveland. Located in the heart of Cleveland's business and financial district, The Hollenden offers in grateful combination, homelike comfort, luxurious surroundings, an unexcelled cuisine and an atmosphere of smartness and reasonable and uniform rates. The Hollenden is one of the distinguished hotels of the country.

The famous Crystal Dining Room is a brilliant and delightful place to dine. In the "Show Boat" you will find "a supper restaurant that is totally different" and music by Emerson Gill and his "Show Boat" orchestra.

The Hollenden Coffee Shop is modern to the last word, with fast counter and table service for the busy man and woman.

I want to take this opportunity to place the service and personnel of this great modern hotel at your command, and to assure you of my personal attention to your comfort while here.

Sincerely yours,

Leo Bluter
Vice Pres. & Gen. Mgr.

In Cleveland-it's The
HOLLENDEN

PRACTICAL ROMANCE

THE old well is a romantic landscaping feature. But practical comfort demands a reliable modern water system in even the most remote hunting lodge.

MYERS

Individual Water Systems, operated by any power... trouble-proof as only experience can make them... for suburban and country homes, cottages, camps and clubs. We have been "PUMP BUILDERS SINCE 1870". Correspondence invited. Booklet on request.

The F. E. Myers & Bro. Co.
120 ORANGE ST., ASHLAND, OHIO

Take Off Your Hat to The MYERS

obvious reasons of efficient administration. As soon as one did it, the other would have to follow.

Once a Group has transformed itself into a Big Bank with Branches, it becomes increasingly difficult to circumscribe by rule its proper area of activity. We may agree that, always, there should be something neighborly about a bank, but it will be almost impossible to define who is or ought to be a bank's proper neighbor. Neighborliness suggests a community of interest, and, with this idea the Comptroller of the Currency has worked out a most ingenious scheme of geographically defining the economic communities of the U.S. His regional plan is excellent as a starter. But clearly, neighborliness may exist to a smaller degree between two juxtaposed flat-dwellers than between a manufacturer in Missouri, a retailer in Maine and a banker in Chicago. Clearly, the old definitions fail us. For the moment paradoxes contain the greater truths. It is precisely a continental nation of 2,973,774 square miles that is becoming the most close-knit of neighborhoods. Look far enough ahead, and see the sharp, although not inevitable, alternative of either nation-wide Branch Banking or a turn in the tide of American civilization. More specifically, it is to be noted that the most compelling reason for regional branch banking (greater safety) applies even more strongly to inter-region or nation-wide branch banking. There is a great deal of diversification within the Ninth Reserve District—there is not only more, but fundamentally more important diversification in the whole body of the U. S.

The issue of Individualism arises more acutely in Banking than in Industry because of the semi-professional nature of the Banker which we have already emphasized. The Anti-branch-bankers assume that the independent local bank-owner will be a better man than the branch-manager. The assumption is too large to accept. In the first place, the man sent to manage a branch, after having been picked, trained and sharpened in a highly successful and competitive organization, may oftener than not be a better *Banker* than the lone stalwart who previously owned the local bank. In the second place, the comparison is inaccurate because it must go further, much, much further. We must compare the branch-manager backed by a tremendous organization guided by the highest-paid ability with the local stalwart backed by very little except himself—backed, in many cases, not even by a proper accountant. And the best test is the very fear of local bankers that Branch Bankers will put them out of business. Not by foul means. Simply by better service.

If this is not the case, if the branch bank cannot attract customers by better service, and if it cannot therefore better serve its locality, then the Anti-branch-banker can have little practical objection to laws permitting Branch Banking. As a matter of fact the Anti-branch-banker probably does assume with the rest of us that the big organization *will* give better service.

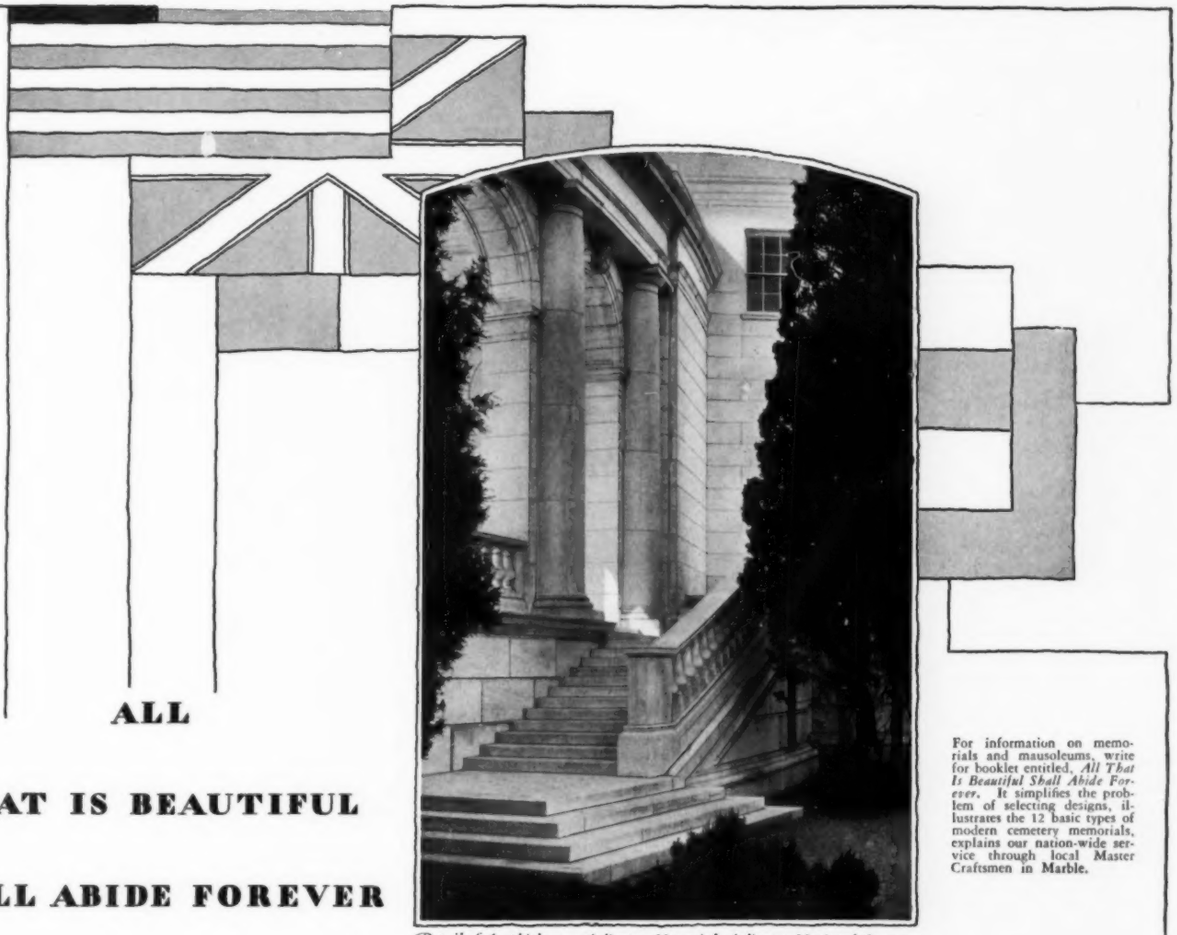
At any rate, all the analogies from contemporary civilization support the view. The Machine has despatched us, with our almost unanimous consent, upon an adventure in consolidation and organization. The hypochondriac among us may have unusually good reason to count the pulse and take the temperature of his Individualism. The rest of us are not easily, perhaps not easily enough, alarmed. On the whole, we like extraordinarily well the huge neighborhood into which our lives are cast. Most of us do business with, or are even employed by "neighbors" we never see through agencies we cannot comprehend. In this new geography our enterprise does not seem to grow less, while its scope most certainly increases. It seems reasonable, therefore, for us to say: Let banking by all means continue to be restricted by geography—but let the Atlas be a 1930 edition.

Appendix

Note on FORTUNE

The design of FORTUNE is based upon its function of presenting a clear and readable text profusely illustrated with pictures, mostly photographic, in a form ample and agreeable to the eye. It is planned upon an economic scale which permits it to go toward that end beyond the technical limitations of most periodicals.

Type appears thin and weak on the coated papers ordinarily required for "half-tone" reproduction of photos, and the reflections from their polished surface are confusing and trying to the eyes. Photographs may be reproduced by the "Intaglio" process—the re-



ALL THAT IS BEAUTIFUL SHALL ABIDE FOREVER

Detail of Amphitheatre, Arlington Memorial, Arlington National Cemetary

For information on memorials and mausoleums, write for booklet entitled, *All That Is Beautiful Shall Abide Forever.* It simplifies the problem of selecting designs, illustrates the 12 basic types of modern cemetery memorials, explains our nation-wide service through local Master Craftsmen in Marble.

THE great Arlington Memorial Amphitheatre symbolizes the whole nation's measureless desire to express and perpetuate its gratitude to its defenders in all wars. ¶ For this supreme purpose, only the best was sought after—not the most costly, but the finest, the most inspiring and beautiful. They who planned strove to create a memorial of matchless splendor and significance so that it should endure and be cherished through unnumbered centuries. They built it *entirely of Vermont Marble.* ¶ Older than the nation is the tradition of Vermont Marble's excellence. In simple tablets and sculptured mausoleums, in noble buildings, in homes where beauty also abides, and in all forms of garden furniture, Vermont Marble represents established culture, serene permanence and sound economy of investment. It is strong, enduring and beautiful. *Specify Vermont Marble.* There are varied types from many famous quarries for every architectural, decorative and memorial purpose . . . always available in every American community. Write for detailed information.

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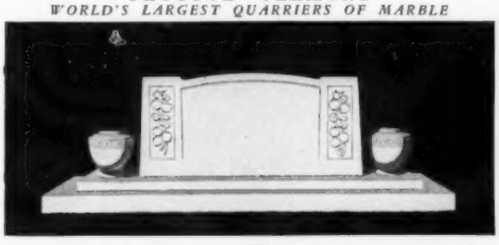

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The Memory Stone

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by Victor Berge and Henry W. Lanier

Victor Berge has lived on adventure ever since he was fourteen and ran away from his home in Sweden. He has dangled his heels above Australia, stared into the fierce faces of cannibals and battled with fabulous monsters of the deep. To feel that tremor of excitement along your spine, don a diving suit with Berge and damn danger in a hunt for pearls. $4.00

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by Col. T. Bentley Mott

Ambassador to France under five Presidents, his life was a grand adventure in world business, politics and diplomacy. He saw the backstage drama of Europe and America. This is his own vivid "autobiographical biography" . . . the story of how he gave up art for business and became a pivotal figure in international life. A biography to rank with *The Life and Letters of Walter Hines Page.* $5.00

ARUNDEL
by Kenneth L. Roberts

Arundel is the greatest news story of the American Revolution . . . how Benedict Arnold's half-starved army blundered through swamps and rapids to the frozen plains of Quebec. This romantic novel is the first complete and accurate description ever written of this dramatic campaign. Compared by Booth Tarkington with *The Cloister and The Hearth* and *The Three Musketeers.* $2.50

THE MASTER OF DESTINY
A BIOGRAPHY OF THE BRAIN
by Dr. Frederick Tilney, M. D.

At last the story that lies behind all other stories has been told . . . the history of the human brain. From its remote beginnings as a single cell to an exquisite machine of terrific power, here is expert knowledge translated into easily understandable words. Dr. Tilney gives you a working knowledge of this most delicate of human organisms, successfully usable every day. $4.00

THE HIDDEN CITY
by Philip Gibbs

To Jevons, the young London doctor, a patient was often more interesting than a case. His sympathy, as sensitive as his stethoscope, at last swept both himself and his sister through an experience that was as beautiful as it was tragic. *The Hidden City* is a powerful novel of the post-war London of misfits and disillusion, with youth rebuilding adventure out of ashes. $2.50

DOUBLEDAY, DORAN & CO.
Garden City, N. Y.

verse of ordinary half-tone printing —with greater depth and richness, and on papers which are natural and agreeable to look at and to handle, without disturbing gloss. But this process does not produce the best result in the printing of text.

The illustrations in FORTUNE have been printed by the "Intaglio" process to avoid coated paper and give better reproduction. The text is printed typographically to give it greater impression, sharpness and clarity.

The size and proportions of the magazine are designed to give scope to its illustrations and text without crowding and margins to its pages which shall be in accord with the best principles of fine bookmaking.

The type selected is a reproduction by the English Monotype Company of the letter designed by Baskerville in the XVIIIth century. It was Baskerville's aim to modernize and clarify the then existing types and this letter which is free from archaisms and familiar to modern eyes has yet none of the condensation and "meanness" of later faces.

The covers are to be a special feature and in place of the "process" reproductions in half-tone generally employed on periodicals, a design by a distinguished artist will appear each month, which will be made especially for printing in flat colors and which will have the character of an original print.

Mr. T. M. Cleland is responsible for FORTUNE's design; he remains as FORTUNE's art editor and he has contributed FORTUNE's first cover.

Note on Color.

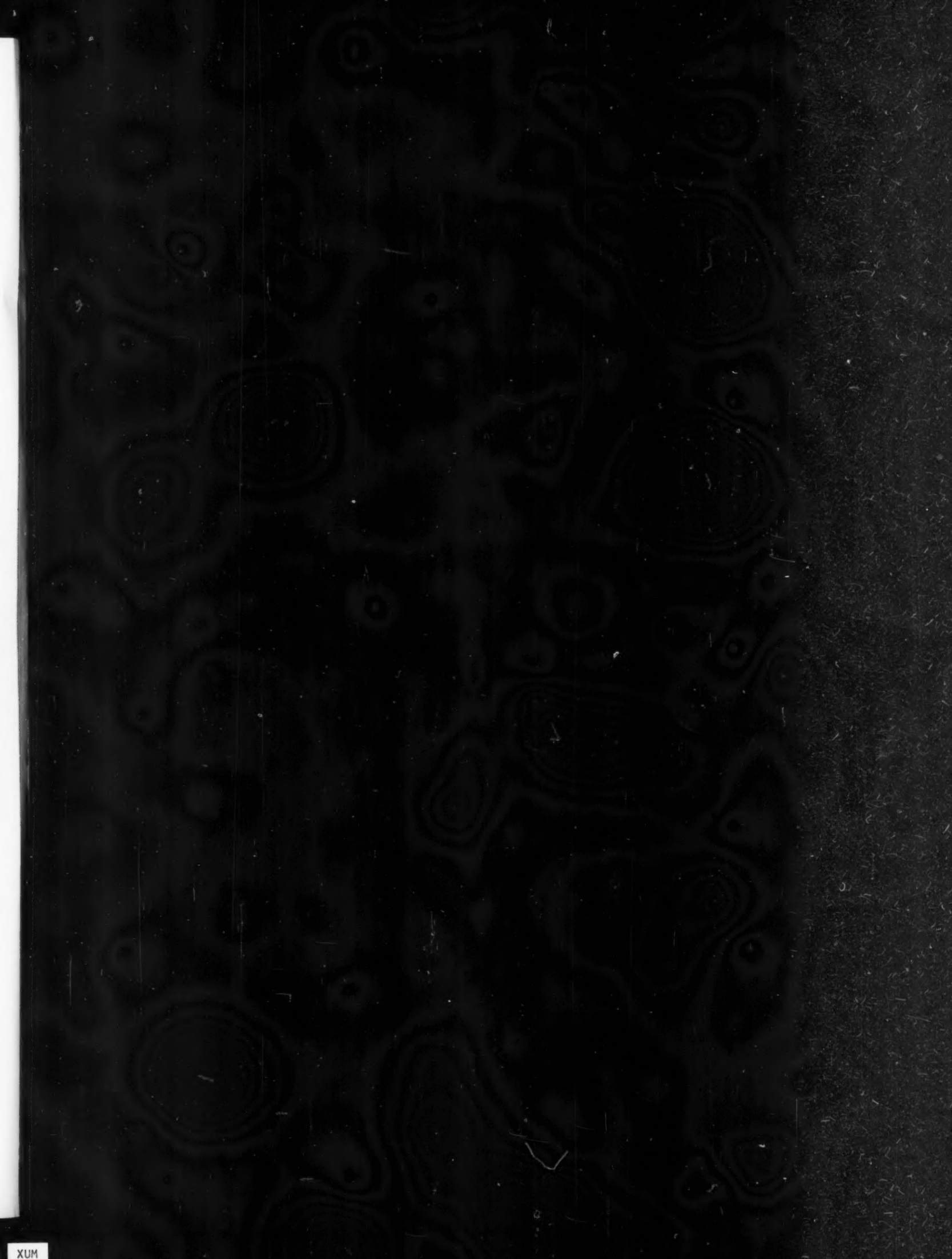
[1] Prof. Hardy describes his color analyser thus: "A specimen and a surface of magnesium carbonate are illuminated from opposite sides of a ribbon filament tungsten lamp. Beams of light from the specimen and from the magnesium carbonate standard are alternately admitted to the slit of a dispersing system. A narrow band of each of the spectra thus formed falls successively on a photoelectric cell and causes a pulsating current in the cell circuit when the two beams are of unequal intensity. This current is amplified by pliotrons and the alternating component is applied to the field coils of a small motor, the armature being supplied from an independent source of the same frequency. With this arrangement, the armature rotates in one direction when the beam from the specimen is more intense and in the opposite direction when the beam from the standard is more intense. When the intensities are equal, the field current ceases and the motor stops. By causing the motor to control a diaphragm which varies the illumination on the magnesium carbonate, the intensities of the two beams are automatically balanced. A pen operating on a rotating drum records the position of this diaphragm while the rotation of the drum changes the wave length of the spectral band admitted to the photoelectric cell. In this way, a complete spectrophotoelectric curve for the entire visible spectrum is traced in approximately 30 seconds. The precision has been found more than adequate for all colorimetric purposes."

General Electric Company will sell the commercial model for $5,000 net f.o.b.

Notes on Swift.

[1] Pork products make up the greatest part of the Packer's total. Each day the U. S. eats about 30,000,000 lbs. of pork products, 19,000,000 lbs. of dressed beef, 5,500,000 lbs. of chicken, ducks, etc., only 1,750,000 lbs. of lamb and mutton.

[2] It should be noted here that among the adjustments made by the hog is not the adjustment from kindness to cruelty. Evidences of cruelty in the yards are difficult if not impossible to find. The S.P.C.A. maintains an office at the gate of the yards; it has full access to the Swift plant. Among Swift's visitors has been the Duchess of Hamilton and Brandon, President of the Animal Defence and Anti-Vivisection Society of London. With her she brought a pistol to demonstrate model British killing methods. Her Swift host looked with some alarm at the pistol, satisfied her by explaining that Swift is experimenting with electrical stunning devices.

[3] L. F. Swift ascribes the birth of the adage to a remark of Founder Father Swift: "Now we use all of the hog except his grunt." Latest Swift wisecrack: "Once we used all of the hog except his squeal. Now we've gone on the air and we use the squeal for static." As a matter of fact, the adage is not quite true. Swift makes no use at present of the paunch manure found in slaughtered animals. Although it is possible to extract useful gases from such manure, Swift has found it cheaper to have it carted away and destroyed.

[4] Three ways are known of destroying the trichina germ—heat, cold and drying. Domestic sausages (Frankfurts, Bolognas, etc.) are cooked before being cased, hence do not need the drying processes of dry "summer" sausages (salami, peperoni). For a time the government prohibited the manufacture of dry sausage; Swift helped in experiments which saved the industry.